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THE UNIVERSITY OF ALBERTA

# THE BUREAUCRATIC CHARACTERISTICS OF SUPERVISORY UNITS AT THE PROVINCIAL LEVEL IN THAILAND

BY

ARUNSRI ANANTRASIRICHAI

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

SPRING 1988

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## DEDICATION

To my father, the late Wong Ung

and

the late Professor L. R. Gue

## ABSTRACT

The primary purpose of this study was to describe and analyze the organizational characteristics of the supervisory units at the provincial level in Thailand. A second purpose of this study was to investigate the satisfaction of administrators and supervisors with their work responsibilities and the organizational structure. The Weberian model of bureaucracy provided the basis for the conceptual framework.

The Organizational Survey Questionnaire was distributed to supervisors and administrators working in twenty-five Offices of the Provincial Primary Education Commissions (OPPECs) which were selected by a stratified random sampling procedure. To establish the sample, the OPPECs were classified by size -- small, medium, and large. Responses of 78 senior administrators, 38 section heads, and 261 supervisors were obtained.

Six meaningful factors of organizational characteristics emerged from the factor analysis. They were labelled as follows: (1) the climate of supervisory work, (2) procedural specification, (3) control of supervisors, (4) administrative authority, (5) bases for work assignment and promotion, and (6) hierarchy of authority. Most scales were intercorrelated and all of them were significantly correlated with the total score. Further analyses revealed that "the climate of supervisory work" was the most important factor. The bureaucratic characteristics of the supervisory units tended towards an autonomous climate, self-imposed standard of control, informal authority, non-technical bases for work assignment and promotion, precisely specified procedures, and centralization of authority.

The two-factor solution -- satisfaction with the operating structure and satisfaction with responsibilities -- was selected to measure satisfaction with the job situation. In addition, two items -- satisfaction with organizational functions and satisfaction with the

job -- were used as scales to measure overall satisfaction. Members of supervisory units were satisfied with their job situation, as measured by these four indices.

Results of the analysis indicated that most organizational characteristics were significantly correlated with satisfaction. "The climate of supervisory work" was most strongly associated with satisfaction. The position held by respondents was related more strongly to the organizational characteristics and satisfaction variables than was the OPPEC size.

Marked differences were found between the bureaucratic characteristics identified in this study and those found in earlier studies. This may be due to differences in cultural context and social characteristics between Thailand and western countries.

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## TABLE OF CONTENTS


| Chapter | | Page |
|---|---|---|
| 1. | INTRODUCTION | 1 |
| | A. Research Questions | 1 |
| | B. Background to the Problem | 2 |
| | Administrative Structure | 2 |
| | Historical Background | 6 |
| | Background to the 1980 Reform | 10 |
| | C. Significance of the Study | 12 |
| | Theoretical Significance | 12 |
| | Practical Significance | 14 |
| | D. Definition of Terms | 15 |
| | E. Delimitations | 16 |
| | F. Limitations | 16 |
| | G. Organization of the Thesis | 17 |
| 2. | LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK | 18 |
| | A. Concepts of Bureaucratic Characteristics | 18 |
| | The Bureaucratic Model | 19 |
| | Criticism of the Weberian Bureaucratic Model | 25 |
| | Measurement of Bureaucracy | 30 |
| | B. Professional and Bureaucratic Orientations | 36 |
| | Characteristics of the Professional Orientation | 37 |
| | Conflicts Between the Professional and Bureaucratic Orientations | 39 |
| | Professional and Bureaucratic Orientations in Educational Organizations | 40 |
| | C. Job Satisfaction | 43 |

Theory of Satisfaction ..... 43
Measurement of Job Satisfaction ..... 45
Relationship Between Job Satisfaction and Organizational Structure . 48
D. Conceptual Framework of the Study ..... 51
E. Summary ..... 52
3. RESEARCH METHODOLOGY ..... 55
A. Design and Method ..... 55
Section One: Organizational Characteristics ..... 56
Section Two: Satisfaction with the Job Situation ..... 57
Section Three: Background Data ..... 57
Pilot-test of the Questionnaire ..... 57
Validity ..... 58
Reliability ..... 59
B. Population and Sample ..... 60
The Population ..... 60
The Sample ..... 60
C. Data Collection ..... 64
Pilot Study ..... 64
Data from the Sample ..... 65
D. Analysis of Data ..... 66
Analysis of the Pilot Study ..... 66
Analysis of Data from the Sample ..... 67
E. Profile of the Respondents ..... 68
Sex, Age, and Level of Education ..... 68
Present Work Experience ..... 70
Previous Work Experience ..... 75
Work Experience in the Ministry of the Interior ..... 77

F. Summary ..... 79

4. DEFINING SCALES FOR ORGANIZATIONAL CHARACTERISTICS AND SATISFACTION ..... 81

A. Analytical Procedures ..... 81

B. Results of the Factor Analysis of Organizational Characteristics ..... 83

Factor 1: The Climate of Supervisory Work ..... 85

Factor 2: Procedural Specification ..... 85

Factor 3: Undefined ..... 87

Factor 4: Control of Supervisors ..... 88

Factor 5: Administrative Authority ..... 89

Factor 6: Bases for Work Assignment and Promotion ..... 90

Factor 7: Hierarchy of Authority ..... 91

C. Discussion of the Results of the Factor Analysis of Organizational Characteristics ..... 93

Comparison of Organizational Characteristics ..... 93

Bureaucratic Characteristics and Thai Culture ..... 96

D. Results of the Factor Analysis of Satisfaction with the Job Situation ..... 98

Factor 1: Satisfaction with the Operating Structure ..... 98

Factor 2: Satisfaction with Responsibilities ..... 100

Overall Job Satisfaction ..... 100

E. Scales for the Measurement of Variables ..... 100

F. Reliability and Intercorrelations Among Scales ..... 101

Organizational Characteristics ..... 101

Satisfaction with the Job Situation ..... 104

G. Summary ..... 107

5. ORGANIZATIONAL CHARACTERISTICS IN THE SUPERVISORY UNITS ..... 108
A. Organizational Characteristics of OPPECs ..... 108
B. Perceptions of Organizational Characteristics Across Sizes of OPPECs ..... 111
Variation in Respondents' Perceptions of Bureaucratic Characteristics ..... 111
Variation in Respondents' Perceptions of Bureaucratic Characteristics by Position ..... 114
C. Perceptions of Organizational Characteristics Across Positions ..... 119
Variation in Respondents' Perceptions of Bureaucratic Characteristics ..... 120
Variation in Respondents' Perceptions of Bureaucratic Characteristics by OPPEC Size ..... 122
D. Summary ..... 128
6. SATISFACTION OF RESPONDENTS WITH WORKLIFE IN THE SUPERVISORY UNITS ..... 130
A. Satisfaction with Organizational Structure ..... 130
B. Differences in Satisfaction Across Sizes of OPPECs ..... 131
Differences in Satisfaction Across Sizes of All OPPECs ..... 132
Differences in Satisfaction by Position ..... 132
C. Differences in Satisfaction Across Positions ..... 139
Differences in Satisfaction Across Positions of Respondents ..... 139
Differences in Satisfaction by OPPEC Size ..... 141
Satisfaction of Respondents in Bangkok Supervisory Unit ..... 146
D. Summary ..... 147

7. RELATIONSHIP BETWEEN SATISFACTION WITH THE ORGANIZATIONAL STRUCTURE AND ORGANIZATIONAL CHARACTERISTICS ..... 149
A. Satisfaction and Organizational Characteristics ..... 149
Results for All OPPECs ..... 149
Results for Small Size OPPECs ..... 151
Results for Medium Size OPPECs ..... 153
Results for Large Size OPPECs ..... 155
Results for Bangkok Supervisory Unit ..... 157
Results for Senior Administrator Sample ..... 159
Results for Section Head Sample ..... 161
Results for Supervisor Sample ..... 161
B. Predictors of Satisfaction with the Organizational Structure ..... 164
Predictors of Satisfaction: Total Sample of Respondents from OPPECs ..... 165
Predictors of Satisfaction: Sample of Respondents from Different Sizes of OPPECs ..... 167
Predictors of Satisfaction: Sample of Respondents Working in Various Positions in OPPECs ..... 173
C. Summary ..... 176
8. DISCUSSION OF THE FINDINGS ..... 179
A. Organizational Characteristics Emerging from the Analysis ..... 179
Perceptions of Organizational Characteristics Across Sizes of Supervisory Units ..... 180
Perceptions of Organizational Characteristics Across Positions in OPPECs ..... 182
B. Satisfaction with Organizational Structure ..... 184

C. Relationship Between Satisfaction and Organizational Characteristics ...186
Relationships Among Variables ...186
Predictors of Satisfaction with the Organizational Structure ...188
D. Summary ...189
9. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS ...190
A. Review of Background and Methodology ...190
Background and Purpose of the Study ...190
Conceptual Framework ...191
Research Methodology ...192
B. Summary of the Findings ...193
Organizational Characteristics ...193
Satisfaction ...196
Relationship Between the Satisfaction Measures and Organizational Characteristics ...198
Predictors of Satisfaction ...199
C. Conclusions ...200
D. Recommendations ...202
Recommendations for Research ...203
Recommendations for Practice ...203
BIBLIOGRAPHY ...205
APPENDIX A: Functions of the Supervisory Unit at the Provincial Level in Thailand ...212
APPENDIX B: Number of Schools and Supervisors Under OPPECs in Thailand ...215
APPENDIX C: Letters to Respondents and Questionnaires ...218
APPENDIX D: Additional Tables ...242

## LIST OF TABLES


| Table | | Page |
|---|---|---|
| 3.1 | Distribution of Sample and of Returns of Questionnaire by Size of OPPEC and Position of Respondents | 62 |
| 3.2 | Chi-Square Test of Frequency in the Sample by Size of OPPEC | 63 |
| 3.3 | Chi-Square Test of Frequency in the Sample by Position of Respondents | 63 |
| 3.4 | Distribution of Respondents in All OPPECs by Sex, Age, and Level of Education | 69 |
| 3.5 | Distribution of Years of Experience of Respondents in Present Position by Size of OPPEC and Position of Respondents | 71 |
| 3.6 | Distribution of Years of Experience of Respondents in Present OPPEC by Size of OPPEC and Position of Respondents | 73 |
| 3.7 | Distribution of Respondents in All OPPECs by Previous Position and Years of Experience | 76 |
| 3.8 | Distribution of Respondents in All OPPECs by Work Experience, Position, and Years of Experience in the MOI | 78 |
| 4.1 | Results of Factor Analysis of Organizational Characteristics: Seven-Factor Solution | 84 |
| 4.2 | Factor Loadings and Means of Items in Factor 1, The Climate of Supervisory Work | 86 |
| 4.3 | Factor Loadings and Means of Items in Factor 2, Procedural Specification | 87 |
| 4.4 | Factor Loadings and Means of Items in Factor 3 | 88 |
| 4.5 | Factor Loadings and Means of Items in Factor 4, Control of Supervisors | 89 |
| 4.6 | Factor Loadings and Means of Items in Factor 5, Administrative Authority | 90 |
| 4.7 | Factor Loadings and Means of Items in Factor 6, Bases for Work Assignment and Promotion | 91 |
| 4.8 | Factor Loadings and Means of Items in Factor 7, Hierarchy of Authority | 92 |
| 4.9 | A Comparison of Bureaucratic Characteristics | 94 |

4.10 Factor Solution for 12 Items Pertaining to Satisfaction with the Job Situation Using Two Factors ..... 99

4.11 Reliability Coefficients of the Organizational Characteristics Scales .....103

4.12 Intercorrelations Among the Six Factors and Total Organizational Characteristics Score .....103

4.13 Reliability Coefficients of Two Scales Measuring Satisfaction with the Job Situation .....106

4.14 Correlation Between the Two Satisfaction Scales .....106

4.15 Correlation Between the Two Satisfaction Factors and Two Overall Satisfaction Items .....106

5.1 Scales Scores on Organizational Characteristics .....109

5.2 Results of One-Way Analysis of Variance of Organizational Characteristics Across Sizes of OPPECs .....112

5.3 Results of One-Way Analysis of Variance of Organizational Characteristics Across Sizes of OPPECs in the Senior Administrator Sample .....115

5.4 Results of One-Way Analysis of Variance of Organizational Characteristics Across Sizes of OPPECs in the Section Head Sample .....117

5.5 Results of One-Way Analysis of Variance of Organizational Characteristics Across Sizes of OPPECs in the Supervisor Sample .....118

5.6 Results of One-Way Analysis of Variance of Organizational Characteristics Across Positions in OPPECs .....121

5.7 Results of One-Way Analysis of Variance of Organizational Characteristics of Small Size OPPECs Across Position of Respondents .....123

5.8 Results of One-Way Analysis of Variance of Organizational Characteristics of Medium Size OPPECs Across Position of Respondents .....125

5.9 Results of One-Way Analysis of Variance of Organizational Characteristics of Large Size OPPECs Across Position of Respondents .....127

6.1 Scale Scores on Satisfaction .....131

6.2 Results of One-Way Analysis of Variance of Satisfaction of Respondents Working in OPPECs of Different Size .....133

6.3 Results of One-Way Analysis of Variance of Satisfaction Across Sizes of OPPECs in the Senior Administrator Sample ..... 135

6.4 Results of One-Way Analysis of Variance of Satisfaction Across Sizes of OPPECs in the Section Head Sample ..... 136

6.5 Results of One-Way Analysis of Variance of Satisfaction Across Sizes of OPPECs in the Supervisor Sample ..... 138

6.6 Results of One-Way Analysis of Variance of Satisfaction of Respondents Working in the Various Positions in OPPECs ..... 140

6.7 Results of One-Way Analysis of Variance of Satisfaction of Small Size OPPECs Across Position of Respondents ..... 142

6.8 Results of One-Way Analysis of Variance of Satisfaction of Medium Size OPPECs Across Position of Respondents ..... 143

6.9 Results of One-Way Analysis of Variance of Satisfaction of Large Size OPPECs Across Position of Respondents ..... 145

6.10 Scale Scores on Satisfaction of Bangkok Supervisory Unit ..... 147

7.1 Correlation Between Satisfaction and Organizational Characteristics of All OPPECs ..... 150

7.2 Correlation Between Satisfaction and Organizational Characteristics of Small Size OPPECs ..... 152

7.3 Correlation Between Satisfaction and Organizational Characteristics of Medium Size OPPECs ..... 154

7.4 Correlation Between Satisfaction and Organizational Characteristics of Large Size OPPECs ..... 156

7.5 Correlation Between Satisfaction and Organizational Characteristics of Bangkok Supervisory Unit ..... 158

7.6 Correlation Between Satisfaction and Organizational Characteristics of Senior Administrator Sample ..... 160

7.7 Correlation Between Satisfaction and Organizational Characteristics of Section Head Sample ..... 162

7.8 Correlation Between Satisfaction and Organizational Characteristics of Supervisor Sample ..... 163

7.9 Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: Total Sample of Respondents from OPPECs ..... 166

7.10 Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: Respondents Working in Small Size OPPECs .....168

7.11 Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: Respondents Working in Medium Size OPPECs .....169

7.12 Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: Respondents Working in Large Size OPPECs .....171

7.13 Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: Respondents Working in Bangkok Supervisory Unit .....172

7.14 Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: The Senior Administrator Sample .....174

7.15 Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: The Section Head Sample .....175

7.16 Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: The Supervisor Sample .....177

D.3.1 Distribution of Respondents in Small Size OPPECs by Sex, Age, and Level of Education .....243

D.3.2 Distribution of Respondents in Medium Size OPPECs by Sex, Age, and Level of Education .....244

D.3.3 Distribution of Respondents in Large Size OPPECs by Sex, Age, and Level of Education .....245

D.3.4 Distribution of Respondents in Bangkok by Sex, Age, and Level of Education .....246

D.3.5 Distribution of Respondents in Small Size OPPECs by Previous Position and Years of Experience .....247

D.3.6 Distribution of Respondents in Medium Size OPPECs by Previous Position and Years of Experience ..... 248

D.3.7 Distribution of Respondents in Large Size OPPECs by Previous Position and Years of Experience ..... 249

D.3.8 Distribution of Respondents of OPPEC in Bangkok by Previous Position and Years of Experience ..... 250

D.3.9 Distribution of Respondents in Small Size OPPECs by Work Experience, Position, and Years of Experience in the MOI ..... 251

D.3.10 Distribution of Respondents in Medium Size OPPECs by Work Experience, Position, and Years of Experience in the MOI ..... 252

D.3.11 Distribution of Respondents in Large Size OPPECs by Work Experience, Position, and Years of Experience in the MOI ..... 253

D.3.12 Distribution of Respondents of OPPEC in Bangkok by Work Experience, Position, and Years of Experience in the MOI ..... 254

D.4.1 Oblimin Factor Solution for 62 Items in Organizational Characteristics Using Seven Factors ..... 255

D.7.1 Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: Total Sample of Respondents from OPPECs ..... 262

D.7.2 Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: Total Sample of Respondents from OPPECs ..... 262

D.7.3 Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: Total Sample of Respondents from OPPECs..... 263

D.7.4 Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: Total Sample of Respondents from OPPECs ..... 263

D.7.5 Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: Respondents Working in Small Size OPPECs ..... 264

D.7.6 Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: Respondents Working in Small Size OPPECs ..... 264

D.7.7 Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: Respondents Working in Small Size OPPECs ..... 265

D.7.8 Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: Respondents Working in Small Size OPPECs .....265

D.7.9 Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: Respondents Working in Medium Size OPPECs .....266

D.7.10 Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: Respondents Working in Medium Size OPPECs .....266

D.7.11 Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: Respondents Working in Medium Size OPPECs .....267

D.7.12 Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: Respondents Working in Medium Size OPPECs .....267

D.7.13 Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: Respondents Working in Large Size OPPECs .....268

D.7.14 Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: Respondents Working in Large Size OPPECs .....268

D.7.15 Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: Respondents Working in Large Size OPPECs .....269

D.7.16 Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: Respondents Working in Large Size OPPECs .....269

D.7.17 Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: Respondents Working in Bangkok Supervisory Unit .....270

D.7.18 Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: Respondents Working in Bangkok Supervisory Unit .....270

D.7.19 Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: The Senior Administrator Sample .....271

D.7.20 Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: The Senior Administrator Sample .....271

D.7.21 Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: The Senior Administrator Sample .....272

D.7.22 Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: The Senior Administrator Sample .....272

D.7.23 Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: The Section Head Sample .....273

D.7.24 Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: The Section Head Sample .....273

D.7.25 Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: The Section Head Sample .....274

D.7.26 Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: The Section Head Sample .....274

D.7.27 Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: The Supervisor Sample .....275

D.7.28 Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: The Supervisor Sample .....275

D.7.29 Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: The Supervisor Sample.....276

D.7.30 Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: The Supervisor Sample .....276

## LIST OF FIGURES


| Figure | | Page |
|---|---|---|
| 1.1 | Administrative Structure of a Typical OPPEC | 4 |
| 1.2 | Sections of a Typical OPPEC | 5 |
| 1.3 | Structure of the Administrative System at a Provincial Level, Thailand | 11 |
| 2.1 | Conceptual Framework of the Study | 52 |

# CHAPTER 1

# INTRODUCTION

The year 1980 was an important milestone in the history of the administration of primary education in Thailand. After nearly twenty years of divided administrative responsibilities between two ministries, the constraints which such an arrangement imposed on the attainment of the national goal to improve the quality of primary education were finally recognized. The Office of the National Primary Education Commission (ONPEC) was established within the framework of the Ministry of Education (MOE) in order to give greater unity to the administration of government primary schools.

An important element of the operation of ONPEC is the decentralization of administrative powers to the provincial level -- there are 73 provinces -- and to the local level as well. This decentralized approach has been adopted with the expectation that it will bring about greater relevance, economy, efficiency, equality and better quality in the provision of education.

When the supervisory units at the provincial level were first established, they were accountable to the Department of General Education. A critical change occurred in the supervisory units in 1980 when they were transferred to ONPEC, the new organization for primary education. The transfer also held significant implications for the administrative structure and operation of the supervisory units. Accordingly, the main purpose of this study was to describe and to analyze the organizational characteristics of the supervisory units under ONPEC.

## A. RESEARCH QUESTIONS

Three problems were addressed in this study: (a) to what extent are bureaucratic dimensions evident in the operation of OPPEC (Offices of the Provincial Primary

Education Commission) supervisory units? (b) to what extent are administrators and supervisors satisfied with the job situations in these supervisory units? and (c) what is the relationship between satisfaction with the job situation and the organizational characteristics of the supervisory units?

The following research questions guided the development of the study:

1. what differences exist in the bureaucratic characteristics of the supervisory units as perceived by administrators at the various levels in the structure?

2. what differences in bureaucratic characteristics exist among the different sizes of supervisory units?

3. what differences are there in satisfaction with the job situations among respondents working at the various levels in the provincial organization?

4. what differences are there in satisfaction with the job situations among respondents working in the different sizes of supervisory units?

5. what is the relationship between satisfaction with the job situations and organizational characteristics of supervisory units?

A number of more specific questions, based on these general research questions, were developed during the data analysis stage.

## B. BACKGROUND TO THE PROBLEM

### Administrative Structure

The Office of the National Primary Education Commission assumes both academic and administrative responsibilities for all primary education in Thailand. With regard to the academic aspect, ONPEC is accountable for developing teaching-learning materials and guidelines focused on the work of teachers. As for the administrative responsibility area, ONPEC organizes and coordinates activities related to curriculum implementation. The success of curriculum implementation depends on the administrative

leadership exercised by ONPEC. The Office of the National Primary Education Commission provides the administrative framework for the education of about 90 percent of the pupils of primary school age and its budget is over 61 percent of MOE's total budget (Suwansathit,1983:23).

The new administrative system of ONPEC is divided into four levels: national, provincial, district, and school-cluster or local level. Each level differs as to the emphasis given to various activities (Office of the National Primary Education Commission, 1985:7) as is summarized below:

| | |
|---|---|
| national level | formulation of national primary education policies and development plans, budget allocation, standard-setting academic requirements, school buildings and expenditures, and appointment of Directors of Provincial and Bangkok Metropolitan Primary Education. |
| provincial level | consideration and approval of all activities undertaken in the province concerning implementation of policies and plans, budget allocation, academic and personnel matters. |
| district level | co-ordination of all activities undertaken in the district, recommendation and provision of basic information concerning workplans, budgetary, academic and personnel matters for submission to the provincial authorities for consideration and approval. |
| school-cluster | mutual co-operation and support, both level material and intellectual, for the improvement and effective operation of all activities of the schools in the cluster, submission of recommendations concerning workplans, budgetary, academic and personnel matters to the district authorities for submission to the provincial authorities. |

Administration at the provincial level is important because it is the level between the national and district administration. At the provincial level, the Office of the Provincial Primary Education Commission (OPPEC) controls all public primary schools in a province. The administrative structure of a typical OPPEC is shown in Figure 1.1.

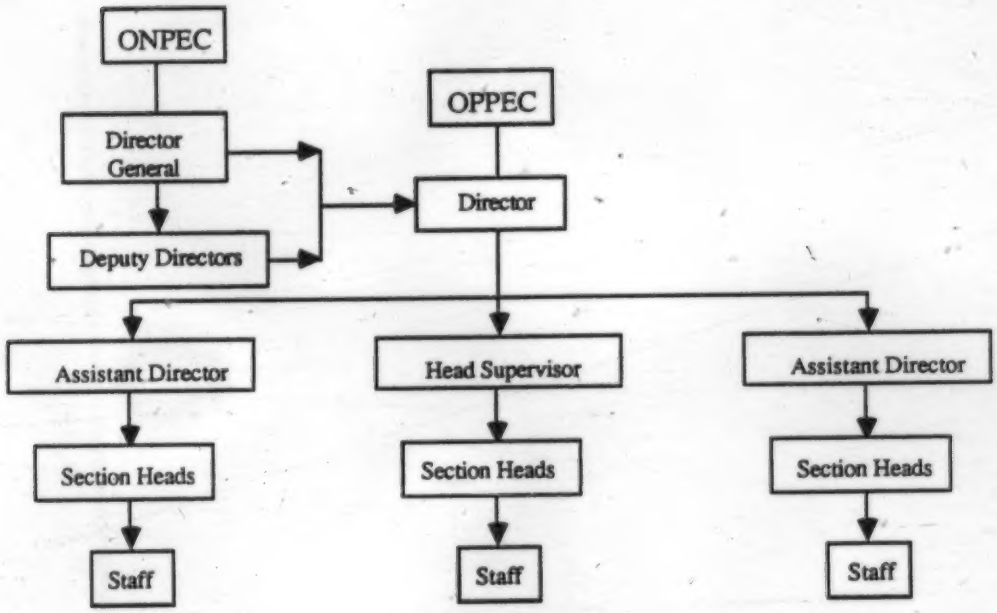


**Figure 1.1**

**Administrative Structure of a Typical OPPEC**

Four senior administrators are responsible for education in each province: (1) the Director; (2) two Assistant Directors; and (3) the Head Supervisor. In addition to other responsibilities, these senior administrators also deal with curriculum implementation.

The director has overall responsibility for the administration of education in the province. For example, documents that go in and out of the office have to be signed out by him or her. Directors delegate responsibility in selected areas to assistant directors and to head supervisors. One assistant director is responsible for the administrative work involving non-academic matters such as personnel, finance, and physical plant. The second assistant director is responsible for administrative work which relates to academic matters such as statistics on primary schools, evaluation, and the quality of primary education. The responsibilities of the head supervisor relate directly to curriculum implementation such as supervising teachers, providing in-service training for primary teachers, developing teaching-learning materials, developing and revising guidelines or

manuals, undertaking research projects, and making recommendations for curriculum development.

To serve the different aspects of their tasks, the units headed by the assistant directors and by the head supervisor are divided into sections as shown in Figure 1.2.

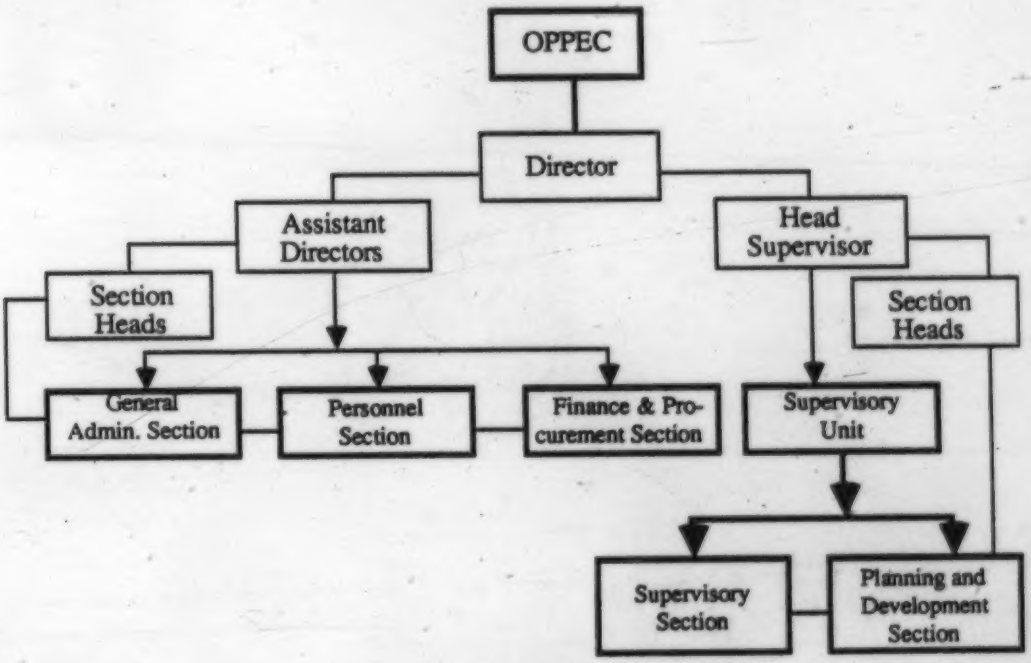


**Figure 1.2**

**Sections of a Typical OPPEC**

The three sections controlled by assistant directors are the General Administration Section, Personnel Section and Finance and Procurement Section. The head supervisor controls the supervisory unit which is divided into two sections, the Supervisory Section and the Planning and Development Section. Each section is led by a section head who reports to the assistant director/head supervisor. The staff in the sections led by assistant directors consist of people with varying levels of qualification ranging from a non-academic background (high school certificate) to a post-graduate academic background

(master's degree). All supervisors in the supervisory units have a minimum of three years of teaching experience and hold a bachelor's degree or certificate/diploma in teaching.

This new structure cannot be fully understood however, without knowing the background of educational administration in Thailand. Therefore, we turn briefly to a consideration of the history of the administration of primary education in Thailand.

## Historical Background

The institutionalized schooling system in Thailand was initiated during the reign of King Rama V (1868-1910). Following the setting up of the first schools in Thailand, a department of education was established and was later up-graded to ministry status in 1892. King Rama V's strategy was to extend basic education by channelling it through the Buddhist temples.

Between 1898 and 1911, the administration of basic education was shared between two government bodies. The Ministry of Education (MOE) was responsible for the administration of basic education in the capital of Bangkok, and the clergy looked after provincial schools under the supervision of the Ministry of the Interior (MOI). In 1913 Education Plan B.E. 2456, which gave clear-cut definition to the management of compulsory primary education in Thailand, was launched.

Between 1913 and 1920 the management of primary education came under the jurisdiction of three government bodies. The MOI and the Metropolitan Administration were responsible for the administration of provincial schools and schools in the Bangkok Metropolis, respectively. The MOE was solely responsible for the primary education curriculum in the country.

In 1921, King Rama VI proclaimed the Primary Education Act B.E. 2464. According to this proclamation, the six-grade structure of primary education was maintained, consisting of four years of general education followed by two years of

vocational education. By virtue of this proclamation, primary education was made compulsory for every school-age child, thus guaranteeing that basic education would be open to all Thai children in the country.

After 1932 the administration of primary education was placed entirely in the hands of the MOI and the MOE. The former took responsibility for the administration of provincial and municipal schools and the latter for the administration of primary schools in the Bangkok Metropolis as well as the academic aspects of primary education development. In 1948 all provincial primary schools were transferred from the MOI to the jurisdiction of the Department of General Education of MOE. As a result, the majority of primary schools, except municipal schools which were still attached to the MOI, were brought under one single government unit. The MOE exercised jurisdiction over primary education for nearly twenty years, a period during which great difficulties were encountered. Educational administrative powers became concentrated in the central government at the expense of effective local education administration. In order to decentralize administration to the provincial government level, primary education was transferred back to the MOI in 1966, under the jurisdiction of the Department of Local Administration. The MOE continued to have responsibility for all academic matters.

The promulgation of the 1960 National Education Scheme resulted in the extension of primary education from six years to seven-years. The new educational structure of 4-3-3-2 (seven years of primary education with four years of lower cycle and three years of upper cycle, five years of secondary education with three years of lower cycle and two years of upper cycle) was implemented. By the late 1960's, however, it was generally felt that the 4-3-3-2 pattern of organization was not satisfactory.

After a decade of repeated expressions of dissatisfaction, the MOE proclaimed a new National Scheme of Education in 1977. This National Scheme of Education provided new guidelines for the implementation of the nation's education programs. With the implementation of the 1977 National Scheme of Education, the organization of

education in Thailand was changed from a 7-3-2-4 to a 6-3-3-4 system whereby six-year primary schooling was compulsory, followed by a three-year lower secondary and a three-year upper secondary for those who were occupation-bound as well as those who were college-bound. The new plan was launched in May 1978, beginning with only one grade at both the primary and secondary levels. An additional grade was added in each successive year until the cycle of 6 grades at both levels was completed in 1983.

From 1978 to 1980 primary education was still administered by the MOI. Consequently, the MOE had to delegate the implementation of the new curriculum at the provincial level to the MOI. Though primary education in each province was administered by the Department of Local Administration (DOLA), MOI, the supervisory unit of each province was still under the Department of General Education, MOE. The administrative structures of DOLA and the supervisory unit were independent of each other; therefore, it was possible for the organizational structures to have different characteristics in such respects as division of labor and hierarchy of authority. For example, the Ministry of the Interior was heavily influenced in its administrative practices by military personnel.

At that time the supervisory units at the provincial level were directly responsible to the Department of General Education, MOE. They were assigned the task of collecting necessary data and statistics and had responsibility for the overall co-ordination of both primary and secondary education. Because the supervisory units at the regional level (one educational region consists of four to twelve provinces) were directly responsible for secondary education, the work of the supervisory unit at the provincial level focused particularly on primary education. The supervisory unit in each province dealt with the academic issues of primary education by cooperating with the DOLA, MOI. Examples of the work of the supervisory units included curriculum implementation, in-service training programs, developing teaching-learning materials, development of new innovations, and evaluation.

According to the administrative system outlined by the National Scheme of Education, each province was to have only one supervisory unit, under the jurisdiction of the Department of General Education. Experience proved that the DOLA, MOI, had insufficient qualified staff to handle the work related to educational programs, especially curriculum implementation. This situation created some problems for the MOI. For example, there were not enough training programs for teachers. Sufficient materials and guidelines were not available to schools, and there were not enough personnel to help teachers understand the new curriculum.

In 1977 primary school teachers submitted a seven-point petition to the government. In one of these points, the teachers appealed to the Government to set up one single unified, independent office for the administration of primary education for the whole country. Consequently, in 1979 a committee was set up by the Government to study problems related to the administration of primary education. As a result of the work of this committee, a resolution was passed by the Cabinet to set up an entirely new department in the MOE.

As of 1980 primary education, especially the academic aspects of primary education development (i.e., curriculum development and teacher training), became the responsibility of the Ministry of Education. The Office of the National Primary Education Commission (ONPEC) was established to take over administration and management of all government primary schools in Thailand except those under the auspices of the municipalities, a few experimental schools under the Department of Teacher Education and the Office of University Affairs, and special schools under the Department of General Education. As a result of the reform of the administrative structure of primary education, in 1980, both the academic and administrative responsibilities for primary education are now under one single Ministry, that being MOE.

Under the new structure of administration, all supervisory units were transferred to the ONPEC. However, they are not directly responsible to the ONPEC; rather, they

are under direct provincial administration. This greater autonomy at the provincial level makes possible departures from previous administrative practice. For example, decisions about academic matters are now made at the provincial level.

**Background to the 1980 Reform**

For many years the national government had expected that advantages would result from decentralizing the administration of education to the local level. Local authorities or provincial governments would be encouraged to provide partial budgetary support for the management of primary education in their own localities. The assumption was made that this would lead to greater effectiveness of the local primary schools. In 1966 all primary schools, except a small number retained by the Department of General Education (DOGE) to serve as models in school administration, were transferred back to the Ministry of the Interior under the jurisdiction of the Department of Local Administration (DOLA). The MOE, however, continued to provide academic services and to co-ordinate all academic activities for all primary schools in the country. As a result, the supervisory unit in each province was still under the DOGE and was therefore autonomous at the provincial level. It also had the same status as the DOLA. The structure of this administrative system, as it existed before the 1980 reform, is shown in Figure 1.3.

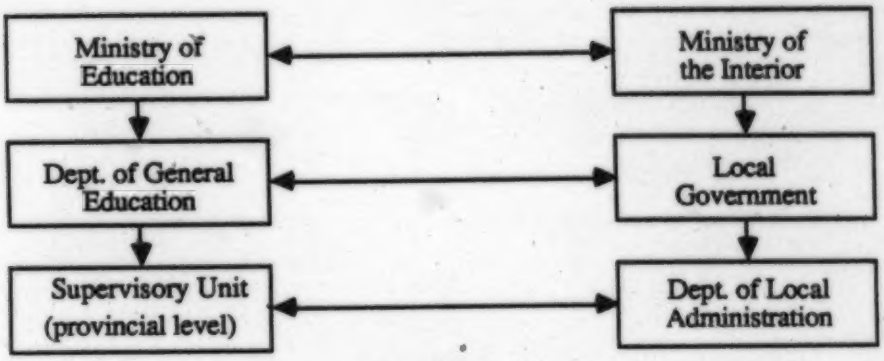


**Figure 1.3**

**Structure of the Administrative System at a Provincial Level, Thailand**

The gains which the national government hoped would follow from the decentralization of responsibility for the administration of education in primary schools to the local authorities did not materialize as envisaged. The local authorities could contribute only 2-3 percent of the primary education budget with the balance being provided by the central government. Moreover, the fact that academic and administrative responsibilities for primary education were in the hands of two separate government bodies also gave rise to certain difficulties in achieving unity in the administration of primary education. The administration of primary education during this period was characterized by serious communication problems. In addition, incentives and opportunities for professional development were lacking, and low morale was widespread among the majority of primary school teachers.

All of the above factors eventually converged and sparked off the 1977 petition. When the ONPEC was established in 1980, administration of primary education at the provincial level became the responsibility of the OPPEC. In this new administrative structure the supervisory unit in every province, the functions of which are largely unchanged, is under OPPEC. (These functions are reported in Appendix A.) In some

provinces, the Head Supervisor is directly accountable to the Director as shown in Figure 1.1; in others, the Head Supervisor reports to an Assistant Director. At the beginning, conflict on academic matters occurred in some provinces because the Head Supervisors had more experience and had higher academic qualifications than the Directors. As a result, some Head Supervisors ignored the new administrative structure and continued to organize their units independently. During the first year under the new administrative system, conflicts were resolved through transfers of administrators at the senior level. Although organizational structures now appear stabilized, in practice the characteristics of the structure may vary among the OPPECs.

For almost ninety years (1892 to 1980) unity was absent from the administration of primary education in Thailand. Although administration was transferred between the MOI and the MOE, the supervisory units which had responsibility for academic activities were always under the MOE. The problems in communication which emerged affected the quality of primary education. In 1980 a single unified, and independent office for the administration of primary education (ONPEC) was established and OPPECs became responsible for both administrative and academic matters at the provincial level. Under the new structure of administration, all supervisory units at the provincial level were transferred to ONPEC and came under the control of the OPPECs. Changes in the administrative context of supervisory units increased the possibility that there might be variations in the structural characteristics of the units.

## C. SIGNIFICANCE OF THE STUDY

### Theoretical Significance

In Kellerman's view (1984:92), all organizations must attend to two major functions in accomplishing their goals. One function is *internal maintenance* which refers to the effort of the organization to maintain the integrity of its various subsystems.

Another function is *external adaptability* which follows from the necessity for the organization to be sensitive to its environment and to be sufficiently flexible internally to respond to change. An effective organization is one which balances the functions of internal maintenance and external adaptability. The leader must direct the activities of subordinates and motivate them to carry out their responsibilities efficiently. Organizational structure guides the leader in directing and supervising subordinates.

In large-scale organizations, leaders should be aware that the bureaucratic model has both functional and dysfunctional effects. The degree of bureaucratization manifested in organizations may be influenced by the behavior of the leader, as is the overall effectiveness of the organization.

Regarding the effectiveness of organizations, Steers (1977:1) concluded that:

> the concept of organizational effectiveness means different things to different people, depending upon one's frame of reference.

In a manner similar to Steers, Cameron and Whetten (1983:11) presented the view that the criteria used to assess organizational effectiveness are based on the personal values and preferences of the individual, and the best criteria for assessing effectiveness are unknown. However, Steers (1977:7) proposed that organizational structure and technology have an influence on effectiveness. Hall (1977:102), also, has reported that organizational structure has an impact on the individual, suggesting that the satisfaction of the individual with work is related to organizational structure. Satisfaction is one variable which can be used to determine organizational success and it is an indicator of organizational effectiveness (Steers, 1977).

Based on the characteristics of bureaucracy, it may be argued that, theoretically, all organizations have similar dimensions. In practice, however, the degree to which bureaucratic characteristics are present may vary from one setting to another and from one organization to another; so also may work satisfaction vary. The cultural context is a significant factor which influences this variation. Therefore, it is possible that

bureaucratic characteristics of the supervisory units in Thailand will differ from the bureaucratic characteristics of organizations in a western country. Furthermore, this possibility of differences in characteristics may lead to differences in satisfaction.

In this regard, it was expected that this study would contribute to knowledge about bureaucratic characteristics and about work satisfaction in a particular cultural context, namely the supervisory units of the Thailand Ministry of Education, as well as to existing knowledge about the relationship between organizational structure and satisfaction in the Thailand society. In addition, the results of this study have potential to increase understanding of the bureaucratic model in a specific cultural context, Thailand, which is substantially different from the cultural context of a western country such as Canada. Finally, findings of this study may provide some ideas and insights about the possibility of different reactions of people in an Asian setting to bureaucratic characteristics because of inherent traditions, values and attitudes toward work.

**Practical Significance**

The change of administrative structure in Thailand's system of primary education affects administration in the supervisory units at the provincial level. The new administrative system is expected to provide unity and improved quality in primary education. In addition, the supervisory units may work more effectively which will lead to more successful curriculum implementation. One of the goals of the Primary Education Policy stated in the Fifth Education Development Plan (1982-1986) is:

> to improve the supervisory system in order to attain maximum efficiency and total access to school supervision. (Office of the National Primary Education Commission, 1983a:12)

Bureaucratic structure is classified as one aspect of educational management inputs by the Office of the National Primary Education Commission (1983b:16). Thus, at the highest administrative level in Thailand education, bureaucratic structure is seen as a factor affecting the quality of the supervisory system. However, there are no empirical

data on the nature of bureaucratic characteristics of the supervisory units under the new administrative system. Confirmation of this point is provided in "A Study for Quality Development of Primary Education B.E. 2525-2534" (1982-1991) which states:

> The bureaucratic and educational structures are known to be interactive and interdependent, positively as well as negatively, and yet there has been no study to confirm that the bureaucratic structure has created problems to the Thai educational system. It is apparent that there is a real need for such a study. (Office of the National Primary Education Commission,1983b:16)

This study yielded data about bureaucratic characteristics of supervisory units in Thailand and the satisfaction of administrators and supervisors with their job situations in these units. These findings may increase knowledge of, and understanding about, the relationship between bureaucratic characteristics and satisfaction in the supervisory units which may contribute to the more effective operation of the supervisory system. Also, this study may be important for policy and planning in educational administration at the provincial level in Thailand.

## D. DEFINITION OF TERMS

For the purposes of this study, relevant terms were defined as follows:

Bureaucratic characteristics refer to six variables or dimensions based on the Weberian model. These are hierarchy of authority, division of labor, rules for incumbents, procedural specification, impersonality, and technical competence.

Satisfaction with the job situation refers to the extent to which individuals react positively or negatively to various aspects of the situation in which they work.

Academic aspects refer to such matters related to curriculum implementation as supervising teachers, providing in-service training for teachers, developing and revising guidelines or manuals, undertaking research projects, and making recommendations for curriculum development.

Administrative tasks refer to the tasks which administrators carry out in order to achieve the goals of the organization. These tasks -- in such areas as personnel, budget, and facilities -- are addressed through such processes as planning, decision-making, organizing, communicating, influencing, coordinating, and evaluating.

Administrators refer to directors, assistant directors, head supervisors, and section heads at the Offices of the Provincial Primary Education Commissions.

Senior administrators refer to directors, assistant directors, and head supervisors at the Offices of the Provincial Primary Education Commissions.

Supervisory units refer to the supervisory units at the provincial level which are under the administration of the Offices of the Provincial Primary Education Commissions.

Section heads refer to persons in charge of the supervisory sections and of the planning and development sections of the supervisory units.

Supervisors refer to the professional staff who are supervised by section heads of the supervisory units.

## E. DELIMITATIONS

1. This study focused on the organizational structure of supervisory units within the Thailand Offices of Provincial Primary Education Commissions (OPPECs).

2. Section heads and supervisors under the Head Supervisor were included in the sample; other section heads and staff under the Assistant Directors were excluded.

## G. LIMITATIONS

1. The perceptions of administrators and supervisors in the OPPECs were used to assess the bureaucratic characteristics of supervisory units. Perceptions of respondents may have been influenced by factors other than the actual operational characteristics.

2. The structured questionnaire approach used in this study placed limits on the opportunity for respondents to report additional information which they might have recalled or had available. Consequently, the results of the analyses are based on a limited perspective on organizational structure.

## G. ORGANIZATION OF THE THESIS

This thesis is comprised of nine chapters. The study was introduced in Chapter 1 with particular emphasis on the background, purpose and research questions, significance, delimitations, limitations, and definitions of terms. Chapter 2 contains a review of the literature and a description of the conceptual framework of the study. The design of the study is presented in Chapter 3. In Chapters 4, 5, 6, and 7 the results of the data analyses are reported. The discussion of the study is presented in Chapter 8. In the final chapter, the thesis is summarized and conclusions and recommendations of the study are presented.

# CHAPTER 2

# LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

This chapter is divided into four major parts. In the first part the concept of bureaucratic characteristics is reviewed. In particular, literature related to the bureaucratic model, criticisms of the Weberian bureaucratic model, and the measurement of bureaucracy is examined. The second part of the chapter contains a review of the literature on professional and bureaucratic orientations and of the conflict between them, specifically in relation to educational organizations. Research findings about job satisfaction and about the relationship between satisfaction and organizational characteristics are presented in the third part. The chapter concludes with a presentation of a conceptual framework for the study.

## A. CONCEPTS OF BUREAUCRATIC CHARACTERISTICS

The sociological study of bureaucratic organizations originated in the seminal research of Max Weber. Weber's conceptualization of bureaucracy was intended to be an "ideal" type (Udy, 1959:791; Rubenstein and Haberstroh, 1966:64; Blau, 1974:38; Aldrich, 1979:9; Osbond et al., 1980:275), but it presented many difficulties to researchers (Pugh and Hickson, 1976:25) in the sense that no "real world" organization exactly conformed to the Weberian model (Luthans, 1973:114). However, Weber's concept of ideal bureaucracy is still very useful as a basis from which organizational characteristics can be described. Hoy and Miskel (1982:81) concluded that "almost all modern organization have many of the bureaucratic characteristics enumerated by Weber -- division of labor and specialization, an impersonal orientation, a hierarchy of authority, rules and regulations and a career orientation."

**The Bureaucratic Model**

Scott (1981:23) indicated that Weber used the term "bureaucracy" to designate a particular type of administrative structure. According to Litterer (1963:30), Weber thought of "bureaucracy" as "the most extreme form of formal organization wherein every task element is completed and exactly defined by a written set of rules and procedures." Scott (1981:24) defined "bureaucracy" in terms of the existence of a specialized administrative staff. Blau (cited in Pugh and Hickson, 1976:26) described "bureaucracy" in terms of achievement of purpose:

> Bureaucracy is organization that maximizes efficiency in administration or an institutionalized method of organized social conduct in the interests of administrative efficiency.

Thompson (cited in Tosi, 1975:2) characterized bureaucracy as

> a highly rationalized impersonal integration of a large number of specialists operating to achieve some objective, upon which is superimposed a highly elaborate structure of authority.

Thus, three theorists, Scott, Blau, and Thompson defined "bureaucracy" in a similar manner. These definitions imply that bureaucratic organizations can be efficient organizations.

According to French, Kast, and Rosenzweig (1985:362-363), the bureaucratic model proposes certain structural characteristics that are found in every complex organization. Scott (1981:56-72) viewed the bureaucratic model as a rational system which exhibits the characteristics of goal specificity and high formalization -- a clear hierarchy of authority, centralization, highly structured rules and regulations, and efficiency. Similarly, Perrow (1973:3) viewed the characteristics of the bureaucratic model as "centralized authority, clear lines of authority, specialization and expertise, marked division of labor, rules and regulations, and clear separation of staff and line."

Some theorists might disagree with Weber about the consequences of bureaucratic functioning but most theorists agree that Weber's formulation of bureaucracy can be accepted as an analytical model of organizations (Scott and Mitchell, 1972:12; Pugh and

Hickson, 1976:25; Hoy and Miskel, 1982:83). Discussions about the major characteristics of Weber's bureaucracy vary slightly among theorists.

1. According to Scott and Mitchell (1972:11-12), Weber thought any organization, public or private, had five major qualities:

Division of labor. Based on this characteristic, tasks are broken down into the most minute particles of specialization so that even the rawest industrial worker (or government employee) can master his task in the shortest time with a minimum of skill. This will produce specialization and make human labor interchangeable, thereby contributing greatly to organizational efficiency.

Centralization of authority. This characteristic solves the problem of coordination which is caused by fragmentation of work. By centralizing authority one achieves control over subordinate units.

Rational program of personnel administration. This characteristic describes the organization's efforts to match the employee with the job. Employees of a bureaucracy are selected by comparing the objective standards set by the officials of the organization for adequate performance of a job with the qualifications of the applicant for the job.

Rules and regulations. Bureaucracies, according to Weber, have well-articulated policies which are impersonally and uniformly applied by officials both to employees within the organization and to the clients outside of the organization.

Written records. Maintaining records that detail the transactions of the organization will promote organizational continuity and will assist the organization to achieve uniformity of action.

2. Hoy and Miskel (1982:81-82) presented four bureaucratic characteristics:

Division of labor and specialization. This characteristic is similar to that presented by Scott and Mitchell. Hoy and Miskel (1982:81) wrote that, according to

Weber, division of labor and specialization mean that "the regular activities required for the purposes of the bureaucratically governed structure are distributed in a fixed way as official duties." Therefore, efficiency should increase because division of labor produces specialization which in turn leads to employees who become knowledgeable and expert at performing their prescribed duties.

Impersonal orientation. According to this characteristic, employees are expected to make decisions based on facts, not feeling. Impersonality on the part of administrators and subordinates assures equality of treatment and facilitates rationality. This characteristic is similar to "rules and regulations" discussed by Scott and Mitchell.

Hierarchy of authority. This characteristic for Scott and Mitchell is "centralization of authority." Hoy and Miskel (1982:81) posited that offices are arranged hierarchically in bureaucracies; that is, "each lower office is under the control and supervision of a higher one."

Rules and regulations. This characteristic provides continuity of operations and ensures uniformity and stability of employee action. Thus, this characteristic addresses a key organizational issue discussed by Scott and Mitchell as "written records."

Career orientation. In a bureaucratic organization, employment is based on technical qualifications. Employees think of their work as a career. Individuals with special skills are protected from arbitrary dismissal or denial of promotion thereby fostering loyalty to the organization. This characteristic is viewed as a "rational program of personnel administration" by Scott and Mitchell.

Thus, Hoy and Miskel have presented bureaucratic characteristics that are similar to those presented by Scott and Mitchell.

3. In a manner similar to Hoy and Miskel and Scott and Mitchell, Luthans (1973:113-115) presented four major characteristics of the ideal bureaucracy.

Specialization and division of labor. Luthans (1973:113-114) described Webers' bureaucracy as follows:

> A specified sphere of competence. This involves (a) a sphere of obligations to perform functions which has been marked off as part of a systematic division of labor. (b) The provision of the incumbent with the necessary authority ... (c) That the necessary means of compulsion are clearly defined and their use is subject to definite conditions.

Positions arranged in a hierarchy. According to Weber as cited by Luthans (1973:114), this bureaucratic characteristic leads to control over every member in the structure:

> The organization of offices follows the principle of hierarchy; that is each lower office is under the control and supervision of a higher one.

A system of abstract rules. A set of formal rules ensures uniformity and coordination of effort. Also, a well understood system of regulations provides continuity and stability.

Impersonal relationships. Luthans (1973:114) noted Weber's ideas about relationships:

> It was Weber's belief that the ideal official should be dominated by a spirit of formalistic impersonality, without hatred or passion, and hence without affection or enthusiasm.

In addition, Luthans (1973:114) reported that technical qualification is another important aspect of the ideal bureaucracy. Technical qualification protects the bureaucrat from arbitrary dismissal and promotions are made according to seniority and/or achievement.

4. According to Scott (1981:67-69), bureaucratic organizations are characterized by:

A fixed division of labor among participants. The regular activities required of personnel are distributed in a fixed way as official duties.

A hierarchy of offices. The organization of offices follows the principle of hierarchy. Each lower office is controlled and supervised by a higher one.

A separation of personal from official property and rights. Personal property is clearly separated from official property and working space from living quarters.

Selection of personnel on the basis of technical qualification. Officials are personally free, selected on the basis of technical qualifications, appointed to office, not elected, and compensated by salary.

Employment viewed as a career by participants. Employment by the organization constitutes a career for officials. Employees gain tenure of position and are protected against arbitrary dismissal.

For the purposes of this study, bureaucratic characteristics are categorized into six dimensions. These dimensions are in fact variables, and any given organization could be rated at any point along a continuum for each dimension. The features of each bureaucratic characteristic are described as follows:

Hierarchical authority. This characteristic calls for control over every member in the organizational structure. As Weber (1947:331) stated, "each lower office is under the control and supervision of a higher one." Hoy and Miskel (1982:82) claimed that:

> Hierarchy is perhaps the most pervasive characteristic in modern organizations. Almost without exception, large organizations develop a well-established system of superordination and subordination, which attempts to guarantee the disciplined compliance to directives from superiors that is necessary for implementing the various tasks and functions of an organization.

Similarly, Luthans (1973:114) asserted that:

> Some organization theorists, such as Herbert Simon, have pointed out that hierarchy is in the natural order of things.

Luthans (1973:114) concluded that "hierarchy is a basic characteristic of complex organizational structure."

Hierarchy is both a structure of domination and a channel through which decisions can be appealed from lower ranks to higher ranks. An organization and its

clients benefit from an officially recognized hierarchy of authority. Decision makers are visible and accountable for their actions.

Division of labor and specialization. In most organizations, tasks are too complex to be performed by a single individual. Therefore, distribution of official duties among a number of positions is required. The duties of each role are clearly specified, and each organizational member operates in a fixed and official jurisdictional area. The incumbent of each position is delegated authority to carry out assigned duties. In addition, employees must know the precise limits of their authority so as not to infringe upon that of others. A highly rationalized division of labor among positions limits each member to only a subset of the organization's tasks. Thus, division of labor facilitates specialization and improves efficiency.

Rules for incumbents. Rules and regulations ensure objectivity and impersonality in the hiring, firing, and promotion process. Weber (1947:330) stated that every bureaucracy

> consists essentially in a consistent system of abstract rules which have normally been intentionally established. Furthermore, administration of law is held to consist in the application of these rules to particular cases.

The rights and duties of each position are protected by a system of rules. Perrow (cited in Aldrich, 1979:11) asserted that rules are the basis of self-protection for organization members because they reduce internal conflict. In addition, the system of rules helps to coordinate activities in the hierarchy and to control the authority of a given level or function of the organization; thus, organizational efficiency is maximized.

Procedural specification. A procedure is taken to be an event that has regularity of occurrence and is legitimized by the organization. Procedures are standardized when there are rules or definitions that purport to cover all circumstances and that apply invariably (Pugh and Hickson, 1976:31). These rules would include those on how to proceed in cases not specifically covered. Most organizations which deal with large constituencies develop standardized procedures that members follow when dealing

with clients, for example, completing standard forms or following standard guidelines in difficult situations.

Impersonal relationships. Weber believed that the ideal official working atmosphere of a bureaucracy should be dominated by rational decision-making without anger or passion and without affection or enthusiasm (Luthans, 1973:113; Hoy and Miskel, 1982:81). The bureaucratic superiors should make completely rational decisions; they must avoid emotional attachment to subordinates and clients. Impersonality assures equality of treatment and facilitates rationality.

Technical competence. In a highly bureaucratic organization, hiring and promotion are ideally based on competence and universalistic standards. Competence may be measured by one's educational qualifications, previous training, standardized tests, or performance in office (Aldrich, 1979:12). Employees are chosen based on their ability and technical knowledge, rather than on technically irrelevant criteria such as sex, race, ethnic origin, religion, social class, or kinship ties. Efficiency is achieved by emphasizing technical competence. According to this characteristic, positions as well as promotions are open to competition and all qualified persons are considered, thereby ensuring that the position will be filled by the most competent individual available.

In summary, bureaucratic characteristics are designed to close off the organization from unwanted influences. Their features are based on rational criteria. Bureaucracy tries to eliminate or control all extra-organizational influences on the behavior of its member.

## Criticisms of the Weberian Bureaucratic Model

To Weber, bureaucracy was the most rational system of organization available. It maximized rational decision making and administrative efficiency. Weber (1947:337) stated that

> Experience tends universally to show that the purely bureaucratic type of administrative organization -- that is, the monocratic variety of bureaucracy -- is, from a purely technical point of view, capable of attaining the highest degree of efficiency and is in this sense formally the most rational known means of carrying out imperative control over human beings.

Hoy and Miskel (1982:83) summarized the bureaucratic model in this way: "Weber's model of bureaucracy is functional in that application of its principles can promote efficiency and goal attainment." However, they also suggested that there was the possibility of dysfunctional or negative consequences, a possibility to which Weber paid limited attention. Scott (1981:70) expresses a similar view when he pointed out that "Weber's formulation, while influential, has been much criticized." Similarly, Luthans (1973:117) claimed that "The Weberian Model can serve equally well in analyzing functional and dysfunctional ramifications of classical organization structure."

Functions and Dysfunctions of the Model

Much of Weber's work is concerned with how organizations can be structured to achieve maximum rationality in the pursuit of goals. According to his model, positions are structured in a hierarchical arrangement with each office having authority over those below it. The authority to make decisions is limited to a designated level within the hierarchy. In order to control the authority of a given level, formalized rules and regulations regarding obligations and privileges of each position are explicitly defined. Rules and regulations ensure objectivity and impersonality. The employee is promoted based on seniority and/or achievement.

Many criticisms have been leveled against the bureaucratic model. First, people do not behave like parts of an efficient machine; they are not completely rational. People are partially emotional and their feelings interfere with their rationality. In reality, individuals do not always act in the organization's best interest, which is sometimes in conflict with their own. Furthermore, they may not have sufficiently complete knowledge to identify the best interests or goals of the organization.

Second, in most organizations rules cannot be written to govern every situation. In some situations, there may be clear jurisdiction but no formal rules and procedures to cover the situations. At every level within an organization, situations will arise in which there is no substitute for a person who can function independently in the absence of formalized rules and procedures. Formalized rules and conformity can obstruct creativity and flexibility and may result in conflict.

Finally, the bureaucratic model cannot deal with structural inconsistencies such as superordinates having less technical knowledge than the subordinates over whom they have authority.

Functions and Dysfunctions of Hierarchy of Authority

A hierarchy of authority helps to solve the problem of fragmentation of tasks which results inevitably from a division of labor. A hierarchy of authority does enhance coordination. The functional attributes of hierarchy are that it maintains unity of command, coordinates activities and personnel, reinforces authority, and serves as the formal system of communication. In theory, the hierarchy has both a downward and upward orientation but in practice it has often turned out to have a downward emphasis (Luthans, 1973:118). Two of the major dysfunctions of hierarchy are distortion and blockage in communication (Hoy and Miskel, 1982:84). Every level in the hierarchy produces a potential communication block. Individual initiative and participation are often blocked, upward communication is impeded, and there is no recognition of horizontal communication. Personnel who follow the formal hierarchy in their communication attempts may waste a great deal of time and energy.

Functions and Dysfunctions of Division of Labor and Specialization

The Weberian bureaucratic model emphasizes that division of labor and specialization enhance the development of expertise; thus it serves as a model for efficiency. But there are dysfunctional qualities of division of labor and specialization.

Hoy and Miskel (1982:83) pointed out, for example, that these organizational characteristics can produce boredom.

Though specialization has been shown to lead to increased productivity and efficiency it can also create conflict between specialized units to the detriment of efforts to achieve the overall goal of the organization. Specialization may impede communication between units.

Functions and Dysfunctions of Rules

The function of rules and regulations is to provide for continuity, coordination, stability, and uniformity. Rules and regulations help members in the organization reduce uncertainty when they are faced with variability in customers, raw material, relations with other members, or simply the problem of how to allocate their time. However, on the other hand, rules often produce organizational rigidity and goal displacement. They often become the ends for behavior rather than the means for more effective goal attainment. Employees may become rule-oriented. In addition, rules may contribute to the bureaucratic image of red tape.

Hoy and Miskel (1982:84-88), in discussing Gouldner's treatment of organizational rules, presented the functions and dysfunctions of rules as follows:

Functions of rules:

i) organizational rules have an explication function, that is they explain in rather concise and explicit terms the specific obligations of subordinates;

ii) the function of rules is to screen, that is, to act as a buffer between the administrator and his or her subordinates;

iii) organizational rules may legitimize punishment;

iv) rules serve a bargaining, or "leeway," function.

Dysfunctions of rules:

i) rules reinforce and preserve apathy by explicating the minimum level of acceptable behavior;

ii) although rules screen the superior from subordinates, that protection may become dysfunctional; goal displacement develops and rules become ends in themselves;

iii) legalism emerges from the screening and punishment; when rules and punishments are pervasive, subordinates can adapt an extremely legalistic stance;

iv) the leeway function of rules involves the ever-present danger of being too lenient.

Functions and Dysfunctions of Impersonality

Weber believed that the ideal official should be dominated by a "spirit of formalistic impersonality." According to this characteristic, in interpersonal relationships total involvement probably never occurs. Each person is concerned with somewhat less than all of the actual or potential needs of the other. Impersonality may improve rationality in decision making, but it also may produce a rather sterile atmosphere in which people interact as "nonpersons." The impersonal approach may result in low morale. Low morale, in turn, frequently impairs organizational efficiency (Hoy and Miskel, 1982:84). Luthans (1973:118) concluded that "The impersonality characteristic of bureaucracy has even more dysfunctional consequences than specialization, hierarchy, and rules."

Because the Weberian bureaucratic model has both functions and dysfunctions, Hoy and Miskel (1982:84) suggested that the important question to ask is, "Under what conditions does each characteristic lead to functional but *not* dysfunctional consequences?" They suggested that "Whatever the answer to this question, the model remains quite useful as both an analytical tool and a guide to scientific research."

In a similar manner, Scott (1981;72) recommended that:

> Although it is clearly possible to criticize and improve upon many specific aspects of Weber's formulation, he remains the acknowledged master of organization theory: the intellectual giant whose conceptions continue to shape definitions of the central elements of administrative systems, and whose historical and comparative vision continues to challenge and inform our more limited views of organizational forms.

**Measurement of Bureaucracy**

According to Zey-Ferrell (1979:14-24), there are two types of organizational measures: attitudinal (subjective or analytical) and global (objective or institutional). Attitudinal types of measures involve measuring employees' attitudes in relation to a particular dimension. This type of measurement relies on the opinions of persons within the organization. Questionnaires and/or interview schedules are generally used in acquiring data and the measure is based on the aggregation of data from members.

Institutional types of measures involve measuring a particular dimension in relation to the characteristics of the organization. This type of measurement uses direct sources such as documents, charters, and organizational spokespersons. The distinction between attitudinal and institutional measures is based on sources of data. Institutional measures use direct-measure sources while attitudinal measures rely on the opinions of persons within the organization. Many methods of acquiring data exist for both types.

To measure the degree of bureaucratization with respect to the important components of the Weberian model, two significant approaches, those of Hall and of the Aston team, are reviewed.

Hall's Approach

This approach is one of the most systematic attempts to measure bureaucratization. It was developed by Richard H. Hall. To measure bureaucracy, Hall (1961) developed an organizational inventory which consisted of six central characteristics of bureaucratic structure: (1) hierarchy of authority, (2) specialization, (3)

rules for incumbents, (4) procedural specification, (5) impersonality, and (6) technical competence. Hall's instrument took the form of a questionnaire which consisted of sixty-two items. Ten to twelve items comprised each sub-scale. The inventory was adapted and modified by researchers such as MacKay (1964), Robinson (1966), and Punch (1969).

MacKay (1964) adapted and modified Hall's organizational inventory to create the school organizational inventory (SOI) for measuring bureaucratic patterns in schools. The SOI is in the form of Likert-type scales that operationalize the same six dimensions of Hall's organizational inventory. Hoy and Miskel (1982:93) noted that the SOI has undergone several revisions and with the exception of the specialization scale, the measures have been found reasonably reliable.

The Aston Team's Approach

The leader of this approach was D.S. Pugh. At the same time that Hall was developing his questionnaire inventory to measure bureaucratic structure, Pugh and his associates at the University of Aston in Birmingham, England, constructed an interview inventory to assess the structure of work organizations (Pugh, Hickson, Hinings, and Turner, 1968; Pugh and Hickson, 1976). Pugh and Hickson (1976:2) identified five characteristics of organizational structure as (1) specialization of activities, (2) standardization of procedures, (3) formalization of documentation, (4) centralization of authority, and (5) configuration of role structure.

The Aston interview inventory was modified by other researchers in order to make it directly applicable to the study of educational organizations. However, Hoy and Miskel (1982:97) have reported that "research on the structure of public schools using the Aston methodology is limited, probably because of the complicated and rigorous scoring procedures for the interview data."

In summary, the Hall and Aston approaches to measuring bureaucracy utilize similar concepts. They come out of the Weberian tradition and use a number of generally recognized characteristic of bureaucracies to conceptualize and operationalize organizational structure. They can be viewed as complementary, not competing approaches; their differences lie in the research strategy. Hall's instrument is a questionnaire requiring subordinates to make subjective assessments of variations in the degree of bureaucracy, whereas the Aston approach is a structured interview with senior administrators in which feelings and experiences are not probed.

Based on Weber's model, a number of formulations of the dimensions of organizational structure have been proposed. There are marked similarities among these various proposals. However, it seems that most studies have adapted Hall's instrument to measure the bureaucratic characteristics of organizations.

Research Related to Bureaucratic Characteristics

To measure the bureaucratic characteristics of organizational structure, Hall (1961) developed an instrument called the Organizational Inventory. He used this instrument to measure bureaucracy in commercial and governmental organizations. The Inventory is comprised of six dimensions or six sub-scales, as follows: Scale I. Hierarchy of authority; Scale II. Division of labor; Scale III. Rules for incumbents; Scale IV. Procedural specification; Scale V. Impersonality; and Scale VI. Technical competence. Sixty-two items are included in the Inventory. Each of six sub-scales consists of ten items except Scale I which has twelve items. The split-half reliability coefficient on all scales is above .80.

Hall used the inventory to study twenty-one governmental and commercial organizations. He found that (1) the degree of bureaucratization was not necessarily consistent along all six dimensions, (2) the six scales were not completely independent, (3) a large organization was not necessarily more bureaucratic than a small one, (4)

significant differences were found in the perceptions of bureaucratization between the executive and non-executive respondents regarding their own organization, and (5) no significant relationships were found when the variables of age, sex, length of service, or educational level were introduced into the analysis of degree of bureaucratization.

MacKay (1964:32) adapted Hall's Organizational Inventory to measure school characteristics and suggested that:

> Hall's research indicates at least three significant things: (1) His Organizational Inventory is a useful device for measuring bureaucratic aspects of organizational structure, (2) There is a need for application of the Inventory to types of organizations other than the commercial and government types which Hall examined, and (3) Factors affecting perception of bureaucratization seem to merit closer examination.

The School Organizational Inventory developed by MacKay consisted of the six dimensions of bureaucratic characteristics proposed by Hall. No major changes were made in concepts but changes were made to eliminate terms specific to commercial or governmental organizations. The split-half reliability coefficient from Scale I to Scale VI were .90, .80, .83, .83, .81, and .80, respectively.

MacKay's study was carried out on a sample of thirty-one Alberta schools where Grade IX was the highest grade taught. A sample of 364 staff members was used in the study. The findings were as follows: (1) the schools differed significantly in the extent to which they displayed the characteristics of hierarchical authority, job specialization, rules of behavior, and impersonality; (2) there was a significant relationship between the bureaucratization of a school and the staff members' ratings of its effectiveness; (3) hierarchical authority, specialization, behavioral rules, procedural rules, procedural specification, and impersonality were correlated negatively with effectiveness ratings by the staff; (4) technical competence was associated with a high effectiveness rating; and (5) there was no relationship between hierarchical position in the school and perception of bureaucratization.

In 1966, MacKay and Robinson (Robinson, 1966) used the School Organizational Inventory to measure the organizational characteristics of schools. As a result of this analysis, the sixty-two items of the original Organizational Inventory used by MacKay were reduced to forty-eight. This revised inventory included the six bureaucratic scales as proposed by Hall. Scale I (hierarchical authority) had ten items, each of Scale II (specialization) and Scale IV (procedural specification) had seven items, and each of Scale III (rules for incumbents), Scale V (impersonality) and Scale VI (technical competence) had eight items.

Robinson also conducted a study, in 1966, on a sample of twenty-nine British Columbia schools. The research findings were as follows: (1) Scales I, III, IV and V were positively and significantly interrelated as were Scales II and VI; (2) Scales I, III, IV and V are negatively and significantly related to Scales II and VI; (3) there was a significant overall difference between schools on each of the six bureaucratic dimensions, that is schools differed widely in the extent to which they emphasized hierarchical authority, specialization, rules for incumbents, procedural specification, impersonality, and technical competence; and (4) there were significant differences between means for certain types of schools (six types of schools classified by grade level) on all dimensions except Scale VI.

Richert (1968) used the Organizational Structure Questionnaire to measure the bureaucratic structure of school systems. The initial questionnaire consisted of seventy-four items selected from those of MacKay (1964) and Mansfield (1967). Thirty-eight items were retained for the final version of the questionnaire in which four factors were identified as centralization, role performance, formalization, and standardized procedures. The findings indicated that school systems differed significantly in the extent to which they displayed the bureaucratic characteristics of centralization, role performance, standardization of procedures, and the total score. These characteristics were significantly and positively linked to each other.

Hall and Tittle (1966) used a Guttman scale of the overall degree of perceived bureaucratization which they obtained by combining scores on six dimensions of the Weberian characteristics of bureaucracy to study twenty-five different work organizations. They found a slight relationship between the perceived bureaucratization and organization size ($r = 0.252$ at the 6 percent level of confidence). But Pugh and his associates (1969) found that (1) the relatively strong correlation between the logarithm of size and structuring of activities such as specialization of roles, standardization of functions, and formalization of procedures ($r = 0.69$) lent strong support to descriptive studies of the effects of size on bureaucratization, (2) larger organizations tended to have more specialization, more standardization and more formalization than small organizations, (3) there was no relationship between size and autonomy ($r = 0.09$) but there was a negative relationship between size and centralization ($r = -0.39$), and a positive one between size and standardization of procedures for selection and advancement ($r = 0.31$), (4) the relationship with centralization had clear implications for the concept of bureaucracy, and (5) the more specialized, standardized, and formalized the organization, the less it was centralized.

Sousa and Hoy (1981) undertook an empirical investigation of 55 secondary schools located in New Jersey which compared the Hall and Aston approaches. They adapted Richard Hall's formulation of an organizational inventory by taking twelve items from Hall's original inventory combined with forty-eight items from MacKay's School Organizational Inventory. Each bureaucratic dimension was measured by an average of ten items. By factor analysis, the School Organizational Inventory in Sousa and Hoy's study was limited to four structural dimensions: hierarchy of authority, presence of rules, procedural specification and technical competence.

Sousa and Hoy modified the Aston interview schedule to measure bureaucratic structure in schools. The Aston studies defined the dimensions of bureaucratic structure

as consisting of specialization, centralization, formalization, standardization, and configuration.

Data were gathered using the Hall and Aston approaches, as described above, and were subjected to comparative analysis. The results showed that (1) there were positive correlations between hierarchy of authority and centralization, technical competence and specialization, presence of rules and formalization, procedural specification and standardization and (2) many of the measures are substantially intercorrelated; for example, hierarchy of authority had a correlation of .77 with presence of rules, -.52 with technical competence, -.49 with specialization, and .38 with centralization.

Concepts of bureaucratic characteristics can be summarized as follows:

1. Although theorists' views on the Weberian bureaucratic model may vary slightly, most agree that this model can maximize efficiency in administration.

2. The bureaucratic model has both functional and dysfunctional aspects particularly with respect to hierarchy of authority, division of labor and specialization, rules, and impersonality.

3. Two significant approaches are used to measure the degree of bureaucratization: Hall's approach and the Aston team's approach. Although both approaches utilize similar concepts, the latter has limited use in school settings because of the complication of scoring procedures. However, they are seen as complementary, not competing approaches.

## B. PROFESSIONAL AND BUREAUCRATIC ORIENTATIONS

In any organization there may be some degree of disagreement between members and the organization itself, if the organization of work is governed by an administrative principle as opposed to an occupational principle. Scott (1981:154) suggested that under the administrative principle the division of labor is determined by an organizational

hierarchy in which the individual worker loses control over the definition of the tasks to be performed and the manner of their performance. Under the occupational principle, Freidson (1973:22) stated that:

> the occupational group obtains the exclusive right to perform a particular kind of work, control training for and access to it and control the right of determining and evaluating the way the work is performed.

Thus, the occupational group develops special arrangements for controlling individual practitioners that do not depend on hierarchical systems. A professional group has some characteristics which differ from a nonprofessional group, and these characteristics may cause conflict with bureaucratic characteristics.

### Characteristics of the Professional Orientation

The term "professional" at the individual level refers to the individual who has successfully entered an occupation that has a specified structural process (Zey-Ferrell, 1979:174). Luthans (1973:14) identified three basic criteria by which to evaluate a profession: (1) a formal, standardized education; (2) a broad responsibility; and (3) a moral and ethical code of conduct. The professional orientation has some characteristics that are different from the bureaucratic orientation.

Professionals take part in a more extensive educational and training (socialization) process compared to that of persons in other occupations. Said another way, professional decisions are based on technical expertise which is acquired through extensive education and training (Hoy and Miskel, 1982:110). A trained professional is an expert in a specific and limited area. The type of socialization engaged in by the professional results in loyalty and identification. In addition, differences in the length of training are important. For example, those professionals who receive the Ph.D. degree tend to develop stronger professional loyalties and identifications than those persons with master's degrees.

A second characteristic of professionals is a client orientation; that is, the clients' needs are paramount to the professional. The professional provides a service to clients. Professionals are expected to subordinate their own interests and to act in the best interest of the client. Clients' needs take priority over the needs of the organization. This placement of priorities by the professional may frequently lead to resistance to organizational rules. In addition, clients are particularly vulnerable to the actions of the professional. Clients typically need assistance but do not know how to help themselves. They place themselves in the hands of professionals, confident that the professionals will act in their best interests.

A third characteristic of professionals is personal autonomy. Professionals strive for autonomy in the work setting and organization. They are a group who control themselves, claiming that they alone are best suited to make decisions in their specialized area. They have an internalized code of ethics that guides activities. Blau and Scott (1962:62) have also pointed out that the professional is controlled primarily by self-imposed standards and peer group surveillance. Zey-Ferrell (1979:175) noted that this characteristic of autonomy is the one variable that sociologists most often analyze when they find bureaucrats and professionals in conflict within an organization.

A fourth characteristic of professionals is an objective, impersonal, and impartial approach. They are expected to avoid emotional involvement and to limit their relationship with clients to the technical task under consideration. This characteristic is consistent with the impersonality dimension of bureaucracy.

A final characteristic of professionals is that they are a colleague-oriented reference group. This characteristic plays an important role in their professional orientation. The "significant others" for a professional are colleagues whose knowledge and competence in the field are useful in decision making (Hoy and Miskel, 1982:111).

In summary, Hoy and Miskel (1982:111-112) proposed that the characteristics of a professional orientation can be summarized as follows:

> [A] *professional orientation* is characterized by technical competence acquired through long training; adherence to a set of professional norms that includes a service ideal, objectivity, impersonality, and impartiality; a colleague-oriented reference group; autonomy in professional decision making; and self-imposed control based upon knowledge and standards.

**Conflict Between the Professional and Bureaucratic Orientations**

Bureaucratic and professional orientations have similarities as well as some differences. Incumbents of both orientations are expected to have technical expertise in specialized areas, to maintain an objective perspective, and to act impersonally and impartially. Hall (1972:143-161) studied professionalization and bureaucratization in a variety of occupational groups. He found that on some dimensions of bureaucracy, there was a positive relationship with professionalization: (1) a highly specified division of labor might well be related to a high degree of professionalization since professionals are specialists and (2) a strong emphasis on technical competence also has a clear relationship with professionalization.

Differences between the two orientations are also apparent. Professionals are expected to act in the best interest of their clients, to exercise peer regulation of conduct, and to base actions on professional knowledge, while bureaucrats are expected to act in the best interest of the organization, to exhibit discipline that stems from one major line of authority, and to act consistently according to organizational rules and regulations. Hall's study (1972:143-161) supported this finding. He found that a rigid hierarchy of authority seemed incompatible with a high level of professionalism, especially in terms of the attributes of autonomy and colleague control. The presence of an extensive number of organizationally based rules and procedures likewise appeared to be negatively associated with a high level of professionalization. These differences cause conflict between the professional and bureaucratic orientations.

Conflicts between professionals and bureaucrats in organizations, as well as between professional and bureaucratic modes of organizing, is a well documented type of vertical conflict. Vertical conflict takes place between hierarchically ranked positions and groups. Such conflicts may arise because either superordinates or subordinates perceive that others have overstepped their bounds.

The conflict between bureaucratic and professional orientations emerges from different emphases. The bureaucratic orientation places an emphasis on (1) hierarchical power by written rules and regulations and approval by a superior, (2) standardization and routinization of procedures, (3) service to the organization and achievement of organizational goals, (4) loyalty to the organization, and (5) line authority. In contrast, the professional orientation places an emphasis on (1) professional norms, (2) uniqueness of the client and complexity of the work process, (3) service to the client, (4) loyalty to the profession, and (5) professional knowledge and autonomy.

Gouldner (1957:281-306) claimed that numerous studies have shown that employees' orientation to a profession rather than to the organization results in conflict. Much of this conflict is intrapersonal, based on overriding loyalty to the profession rather than the bureaucratic organization. Interpersonal conflict results over bureaucratic and professional differences regarding formalization of rules and supervision.

In summary, Hoy and Miskel (1982:113) posited that the major source of conflict between the organization and the professional is the conflict between "professional expertise and autonomy" and "bureaucratic discipline and control."

## Professional and Bureaucratic Orientations in Educational Organizations

Generally, discussions of educational organizations and professionals are limited to schools and teachers. Occasionally a similar approach is used to analyze school administrators. This part will focus on schools as the representative unit of educational organizations.

Scott (1981:222-224) asserted that professionals perform the core tasks of the organization under two general types of arrangements: autonomous and heteronomous professional organizations. He pointed out that schools are labeled as heteronomous types since professionals in schools are clearly subordinate to an administrative hierarchy: the amount of autonomy granted them is relatively small; they are subject to administrative controls; and their discretion is clearly circumscribed. On the other hand, Hoy and Miskel (1982:117-120) posited that teachers have professional orientations because their teaching is characterized by a professional orientation (1) an orientation to students, (2) an orientation to the profession and professional colleagues, (3) a belief that competence is based on knowledge, and (4) a belief that teachers should have decision-making authority.

The work of professional participants in heteronomous professional organizations takes place within a structure of general rules and of hierarchical supervision. However, individual performers are given considerable discretion over task decisions. In particular, decisions concerning means or techniques. As individual professionals in the school, teachers make choices regarding instructional techniques and exercise autonomy with regards to decisions about students.

Though teachers have a professional orientation, they function in a school -- which can be described as a formal organization. As employees of a school district, teachers may also demonstrate the characteristics of the bureaucratic orientation: (1) loyalty to administration, (2) loyalty to the organization, (3) a belief that teaching competence is based on experience, (4) an endorsement of practices which treat personnel interchangeably, (5) an emphasis on standardization and on rules and regulations, and (6) loyalty to the public. Conflict may emerge in schools if teachers' professional authority is not supported by the climate or structure of the organization. However, Marjoribanks (1977:104-113) suggested that a bureaucratic orientation and the professional attitudes of teachers need not be in conflict if schools increase the professional autonomy of teachers.

According to the above descriptions of autonomous and heteronomous professional organizations, and of professional and bureaucratic orientations, the supervisory units at the provincial level in Thailand can be described as heteronomous professional organizations in which professional supervisors are employed. The supervisory unit in Thailand appears to exhibit characteristics similar to those of the school as described above. A comparison of positions in schools and positions in the supervisory units in Thailand is presented below:

| School | Supervisory Unit |
|---|---|
| i) school administrators (principals, assistant principals) | i) senior administrators (directors, assistant directors, head supervisors) |
| ii) department heads (classification based on subjects or areas) | ii) section heads (classification based on functions or areas) |
| iii) teachers (classification based on subjects or areas; clients are students and parents) | iii) supervisors (classification based on subjects or areas; clients are principals, teachers, and other educational officers) |

In light of the above discussion, it seems possible that conflict between professional and bureaucratic orientations may emerge in the supervisory units in Thailand. The Offices of the Provincial Primary Education Commissions (OPPECs) appear to be formal organizations with characteristics that are reflective of the bureaucratic orientation. On the other hand, members in the supervisory units may display characteristics that are reflective of the professional orientation. However, there

are no empirical data to support this suggestion. Therefore, this study will examine the degree of bureaucracy in supervisory units at the provincial level in Thailand.

## C. JOB SATISFACTION

Despite numerous studies, the concept of job satisfaction is nebulous (Mumford, 1972:4). Hoppock (1935:47) defined job satisfaction as any combination of psychological, physiological, and environmental circumstances that cause a person to say "I am satisfied with my job." Vroom (1964:99) defined job satisfaction as "the positive orientation of an individual toward the work role which he is presently occupying." Locke (1969:316) defined job satisfaction as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating one's values." Related to education, Hoy and Miskel (1982:334) stated that:

> In education settings job satisfaction can be said to be a present and past-oriented affective state that results when the educator evaluates his or her work role.

In order to gain a better understanding of job satisfaction, a number of theories and selected studies measuring job satisfaction are described below.

### Theory of Satisfaction

Two popular theories of satisfaction are Maslow's need hierarchy theory and Herzberg's dual-factor theory.

#### Maslow's Need Hierarchy Theory

This theory has gained considerable attention in the study of motivation. Hudgins et al. (1983:394) claim that this theory probably lends the best understanding of human needs. Maslow's model consists of five basic need levels organized in a hierarchy. From lowest to highest, they are: (1) physiological needs, (2) safety needs, (3) belongingness and affiliative needs, (4) esteem needs, and (5) self-actualization needs.

These five needs are related to one another and are arranged in a hierarchy of prepotency; that is, lower-order or more basic needs must be satisfied before the next higher-order need can be satisfied.

Maslow (1968:22-23) proposed that the first four needs were "essentially deficits in the organism, empty holes, so to speak, which must be filled up for health's sake, and furthermore, must be filled up from without by human beings other than the subject." Clifford (1981:353) concluded that those who met the four lower needs were free to fill their needs for self-actualization.

Hudgins et al. (1983:395-398) clarified this point and suggested that self-actualization differs from the other needs in the hierarchy in one important respect. Self-actualization is a continuous process of growth and development that builds on needs for achievement, competence, and independence and includes concepts of mastery and creativity.

Hoy and Miskel (1982:139-140) noted that the meaning of self-actualization is the subject of much discussion. They supported the simple definition of Campbell and Pritchard (1976:97): self-actualization is the need to be what an individual wants to be, to achieve fulfillment of life goals, and to realize the potential of his or her personality.

Based on Maslow's theory, Porter (1962:375-384) developed the Need Satisfaction Questionnaire (NSQ). Trusty and Sergiovanni (1966:168-180) modified the NSQ for use in specific organizational settings, including schools.

Herzberg's Dual-Factor Theory

The basic postulate of this theory is that one set of rewards contributes to job satisfaction and a separate set to job dissatisfaction. Positive events are dominated by references to achievement, recognition, possibility of growth, work itself, responsibility, and advancement. Negative events are dominated by references to interpersonal relations with superiors and peers, technical supervision, company policy and administration,

working conditions, and personal life. In short, this theory postulates two sets of factors: (1) motivators or satisfiers which produce satisfaction, and (2) hygienes or maintenance factors which produce dissatisfaction. Job satisfaction and dissatisfaction are separate and distinct dimensions; they are not opposites. Absence of job satisfaction factors does not necessarily cause job dissatisfaction.

Herzberg's Dual-Factor theory was derived from the models and assumptions of Maslow's theory. The two concepts seem to be closely related. However, Herzberg went further than Maslow, by cutting the hierarchy off near the top and maintaining that motivation only results from some elements of esteem needs and self-actualization (Stuart-Kotze, 1980:90). Hoy and Miskel (1982:150) report that Herzberg's theory has been widely accepted and used as the theoretical rationale for numerous empirical investigations and administrative innovations.

**Measurement of Job Satisfaction**

Steers (1977) proposed that problems still exist regarding the measurement of organizational effectiveness because there is little agreement among investigators concerning which criteria represent useful indicators of effectiveness. However, in an effort to make the abstract notion of effectiveness somewhat more tangible (and measurable), several organizational analysts have attempted to identify the more salient facets associated with the construct. Job satisfaction is one of the five facets which is widely used to measure organizational effectiveness (Steers, 1977:38-45, 175). Questionnaires are typically used to measure job satisfaction. Questionnaires vary primarily in their directness in assessing the concept.

The most well known instrument used to measure job satisfaction is the Job Description Index (JDI) which was developed by Smith and her co-workers (Smith et al., 1969). The JDI contains five main sub-scales for satisfaction: work on present job,

supervision, present pay, people on your present job, and opportunities for promotion. As well, an indication of overall job satisfaction is sought.

Numerous studies of job satisfaction have been undertaken in education. Holdaway (1978:31) posited that "Some earlier writers (e.g. Hoppock, 1935) emphasized overall job satisfaction, but most of the later writers also examined satisfaction with discriminable aspects of the job situation." Gunn (1984) investigated the extent to which the job satisfaction of high school principals in senior high schools in Alberta related to selected individual characteristics and perceptions of their school's effectiveness, their effectiveness as a leader and their level of influence, and to organizational characteristics of the schools. By using a questionnaire and a semi-structured interview he found that there is a direct relationship between the overall job satisfaction of senior high school principals and their perceptions of their school's overall effectiveness, their overall effectiveness as a leader, and their overall level of influence.

Rice (1978) measured the job satisfaction of principals. He examined the extent of overall job satisfaction, satisfaction with aspects of the job, and the relationship between specific individual variables and job satisfaction. The major findings were as follows: (1) principals were moderately satisfied with the job and with specific aspects of the job; (2) in general, higher level needs of principals were less satisfied than lower level needs; (3) principals identified relationships with teachers, responsibility and autonomy, and a sense of accomplishment as sources of satisfaction; (4) administration and policies, routine work, workload, societal attitudes towards education and parental attitudes towards the school were selected as sources of overall dissatisfaction; (5) the Motivator factor contributed more to overall satisfaction and the Hygiene factor contributed more to overall dissatisfaction; (6) interpersonal relationships with teachers was found to be a satisfier rather than a dissatisfier; and (7) responsibility and autonomy and Principal-Teacher Work Involvement contributed most to overall job satisfaction.

Sonoda (1983) studied the job satisfaction experienced by Further Education Coordinators in Alberta. Overall satisfaction, the facets of the job contributing to job satisfaction and dissatisfaction, the importance of the job facets to satisfaction, and the relationships among the personal-social, professional, and organizational characteristics of the coordinators with job satisfaction were determined. In addition, the degree of consistency of the research findings with Herzberg's dual-factor theory was investigated. A questionnaire was used to collect data from 68 further education coordinators. The findings indicated that (1) coordinators generally experienced moderate overall job satisfaction, (2) the job facets considered most important to job satisfaction were related to the interaction with the Further Education councils, (3) least satisfaction with the facets of the job involved salary matters and accessibility to clerical assistance, (4) job satisfaction was most related to recognition and responsibility, (5) job dissatisfaction was associated with salary matters, administrative policies and procedures, and interpersonal relationships, and (6) the findings of this study were consistent with Herzberg's dual-factor theory.

Armann (1981) examined job satisfaction of Directors of Nursing in Western Canada. The 118 Directors identified job facets which contributed to job satisfaction and dissatisfaction. The relationships between job facet satisfaction and selected variables related to organizational, personal-social and their professional characteristics were determined. A questionnaire was used to collect data. The results revealed that directors were moderately satisfied in their jobs. The aspects which contributed to dissatisfaction were nonavailability of provisions for sabbatical leave, unavailability of support staff and portion of time devoted to operational duties. Responsibility in their job, competence of employees and support of staff in their attempts to introduce new ideas were important to their job satisfaction. Involvement in decision-making contributed to positive feelings toward the job. In addition, the situations which contributed most to job satisfaction or overall job satisfaction were aspects of the work itself, interpersonal relationships and

responsibility. Aspects of unionism, medical staff bias and hospital policy contributed to job dissatisfaction. Generally, the findings of this study were consistent with Herzberg's two-factor theory.

Onuoha (1980) investigated the job attitudes related to job satisfaction and job dissatisfaction of educators in rehabilitation medicine in Canadian universities. Job facets and job aspects which contributed to job satisfaction and dissatisfaction of physical and occupational therapy educators were identified. In addition, the extent to which Herzberg's two-factor theory of job satisfaction was applicable to this professional group was explored. A questionnaire was used to collect data from 94 educators. The major findings were as follows: (1) in general, the respondents were moderately satisfied; overall job satisfaction and intrinsic job facets contributed more to overall job satisfaction than did extrinsic job facets; (2) significant differences in the level of overall job satisfaction existed among the respondents grouped according to their level of education, salary scales, and years in present employment; and (3) benefits, altruism, work conditions, environment support and work ethos were the factors which accounted for some of the differences in the level of overall job satisfaction of the respondents grouped by selected demographic characteristics.

In summary, similar results were found in the studies by Gunn (1984), Rice (1978), Sonoda (1983) and Onuoha (1980). The overall satisfaction of respondents was moderate; the findings were consistent with Herzberg's two-factor theory.

**Relationship Between Job Satisfaction and Organizational Structure**

As mentioned earlier, job satisfaction has been used as a criterion in measuring organizational effectiveness. Some findings indicate that job satisfaction is related to other factors such as productivity (Azumi, 1972:419; Luthans, 1973:37; Zey-Ferrell, 1979:329; Hoy and Miskel, 1982:333), absenteeism (Price, 1972:14) and program change (Azumi, 1972:486-487). Some studies correlated job satisfaction with the

organizational structure. Since the present study examined this relationship, a number of studies which examined the relationships between job satisfaction and organizational structure are particularly relevant.

Indik (1965) investigated the relationship between organizational size and membership participation. Three sets of data were used: (1) a set of 32 delivery organizations (15-61 male members); (2) a set of 36 automobile dealership organizations (25-312 male and female members of which females were in the minority); (3) a set of 28 units of a voluntary association (101-2989 female members). Indik defined "specialization" in terms of "varied job content"; the less varied the job content, the greater the specialization. He predicted that a high degree of specialization would produce a low degree of satisfaction that would, in turn, produce a low degree of membership participation. The prediction was confirmed for the delivery organization and the automobile dealerships, but not for the voluntary associations. He added that the results for the voluntary associations were in the right direction, but were not statistically significant.

Based on studies of occupational differences in work satisfaction, Etzioni (1969:225) reported that:

> Work satisfaction varied greatly by occupation. Highest percentages of satisfied workers are usually found among professionals and businessmen. In a given plant, the proportion satisfied is higher among clerical workers than among factory workers, just as in general labor force samples it is higher among middle-class than among manual working class occupations. Within the manual working class, job satisfaction is highest among skilled workers, lowest among unskilled labors and workers on assembly lines.

In general, the higher the level of skill and responsibility, the greater the job satisfaction.

Gosine and Keith (1970) studied the relationship between urban female public school teacher personality characteristics and organizational structure. The instruments consisted of the Organizational Inventory (questionnaire on bureaucracy), a Satisfaction

Questionnaire, and the Edwards Personal Preference Schedule. They found that (1) the interaction between bureaucratization and teacher need for "independence" was an important determinant of job satisfaction for teachers with high independence needs and (2) that schools with high bureaucratization were associated with high satisfaction for teachers with low independence needs.

Ratsoy (1973) concluded from reviewing the literature that teacher job satisfaction, in general, was lower in schools where teachers perceived a high degree of bureaucracy. However, Hoy and Miskel (1982:338) suggested that:

> When specific bureaucratic dimensions of schools are related to job satisfaction, a complex picture emerges. Bureaucratic factors which enhance status differences among the professionals, such as the hierarchy of authority and centralization, produce low levels of satisfaction. But factors which clarify the job and yield equal applications of school policy promote high levels of satisfaction.

Holdaway (1978:27-28) indicated that many educational administrators and some writers seem to hold the view that professionalization of teachers would produce higher levels of satisfaction. He gave some examples: (1) Grassie and Carss (1973) found two distinct "attitude" groups (the professionals and the nonprofessionals) and concluded that administrative action taken to increase the satisfaction of one group may decrease the satisfaction of the other group; and (2) Corwin (1965) concluded that increased professionalism produced increased militancy and conflict, particularly with authority figures.

Finally, Steers (1977:68) suggested that several aspects of organizational structure can affect certain facets of organizational effectiveness. He also proposed that the relationships between the attitudinal and attachment facets of effectiveness such as job satisfaction, retention, and attendance, and the structural variables of centralization, specialization, formalization, organization size, and work-group size are negative. In general:

> employees tend to become more attached to an organization, as well as more satisfied, when they have an opportunity to accept more responsibility, when their tasks provide them with greater variety and involvement, when rules and regulations are kept at a minimum, and when the organization and work group are of a modest size.

The studies on relationship between job satisfaction and organizational structure showed that these two sets of variables were associated.

## D. CONCEPTUAL FRAMEWORK OF THE STUDY

On the basis of the literature review of bureaucratic characteristics, the six dimensions of bureaucratic organization proposed by Hall and developed by MacKay and Robinson were considered to be appropriate for the purpose of this study. Bureaucratic structure was a major variable in the study; another major variable was satisfaction with the job situation. The variables in the study and their relationships are shown in Figure 2.1.

The supervisory units at the provincial level in Thailand were the focal organizations for this study. The structure of supervisory units was conceptualized in terms of six general bureaucratic characteristics: hierarchy of authority, division of labor, rules for incumbents, procedural specification, impersonality and technical competence. Some variation in these characteristics from those in other settings was expected because of the distinctive social, political and cultural context of the supervisory units. Variations in these characteristics was also expected across different sizes of organizations. The units were classified into three sizes -- small, medium, and large -- and Bangkok was also considered separately. Perceptions of the organizational characteristics were assumed to be influenced by the positions held by organizational members and by some of their personal and professional characteristics. Positions of respondents were classified into three categories: senior administrators, section heads and supervisors. Both the position

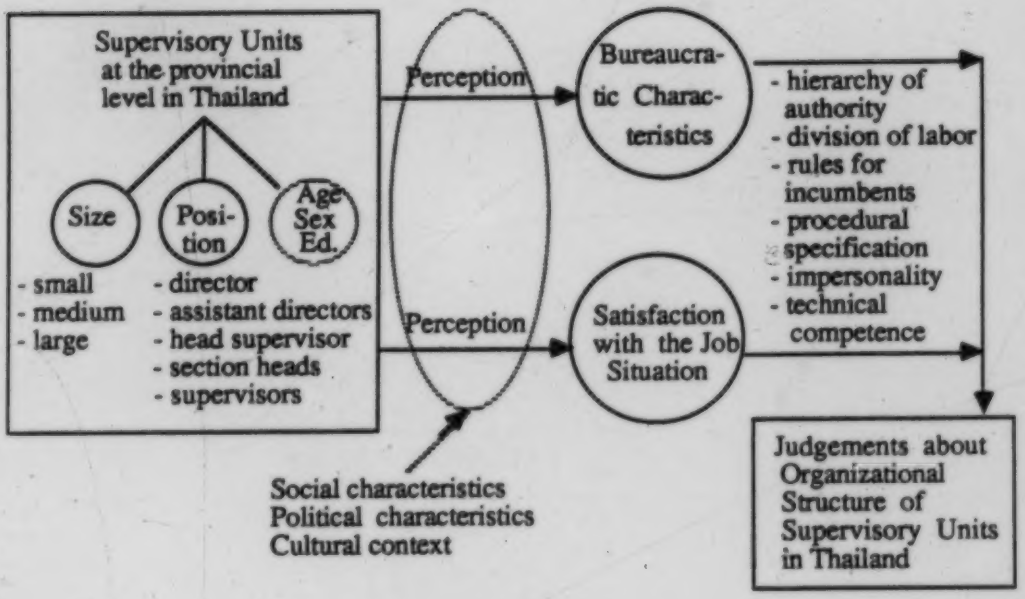


**Figure 2.1**

**Conceptual Framework of the Study**

held and the structure of supervisory units were expected to be related to the degree of satisfaction with the job situation. Background characteristics of respondents (age, sex, educational level) and some external characteristics (social, political and cultural), which were not examined directly, were considered in the interpretation of results. On the basis of the perceptions of organizational characteristics and the degree of job satisfaction, the researcher intended to make some judgements about the structure of supervisory units in the Thailand OPPECs.

## E. SUMMARY

In this chapter, three areas of the administrative literature -- concepts of bureaucratic characteristics, professional and bureaucratic orientations, and job

satisfaction -- were examined. The review showed that Weberian bureaucracy was an "ideal" type. Weber's formulation has been used as an analytical model of organization. Formal organizations are characterized by features of division of labor and specialization, hierarchy of authority, impersonal orientation, rules and regulations, and technical competence. Though theorists have accepted the applicability of the Weberian bureaucratic model, they have also criticized and pointed out dysfunctions of this model.

Two approaches used to measure bureaucratic characteristics were described. Hall's approach relies on a questionnaire called the Organizational Inventory which focused on six characteristics of bureaucracy. The Aston approach involves a structured interview focusing on five characteristics of organizational structure. Both approaches have been widely used but Hall's approach is more applicable in the educational setting.

Professional and bureaucratic orientations are characterized by similarities as well as differences. In terms of both orientations, members of organizations are expected to demonstrate technical expertise, to maintain an objective perspective, and to act impersonally and impartially. Conflicts due to the different characteristics emerge between professionals and bureaucrats. Results of research suggest that teachers, as professionals in schools which have bureaucratic structures, may experience conflict with administrators.

Studies related to job satisfaction are numerous but the concept of job satisfaction is nebulous. Several definitions and theories of job satisfaction have been developed. Maslow's need hierarchical theory consists of five basic need levels. Herzberg's dual-factor theory postulates two sets of factors: (1) motivators or satisfiers which produce satisfaction and (2) hygienes or maintenance factors which produce dissatisfaction. Numerous studies have used Herzberg's dual-factor theory as a basis to measure job satisfaction. The questionnaire is the typical instrument. Studies related to job satisfaction and to the relationship between job satisfaction and organizational structure

indicated that a variety of indicators have been used and that job satisfaction was related to characteristics of bureaucracy.

The conceptual framework of the study was based on two sets of variables. One set consisted of variables on the size of supervisory units and position of respondents. Another set consisted of variables on bureaucratic characteristics (Hall's approach) and satisfaction which were assumed to be influenced by variables in the first set.

# CHAPTER 3

# RESEARCH METHODOLOGY

This chapter describes the research methodology used in the study. In the section which follows, the description of the development of the questionnaire is followed by an explanation of population and sample. In a subsequent section, the procedures applied in data collection and the analyses are explained. Finally, the profile of the respondents is presented.

## A. DESIGN AND METHOD

The research design selected for this study was essentially a survey which relied exclusively on quantitative methods. Data were collected by the use of a questionnaire. The descriptive survey technique and questionnaire approach to data collection were deemed to be appropriate for this study for a number of reasons. First, the descriptive survey attempts to measure what exists without questioning why it exists (Ary et al., 1985:337). Second, an attempt is made to study relationships which may be causal but not to test cause and effect relationships (Guba, 1963:244-248). Third, some advantages of the questionnaire approach are that it gathers data in response to specific questions and that all respondents answer within the same framework, if the structured format or close-ended approach is used (Wiersma, 1980:147; Vockell, 1983:82). Fourth, the questionnaire is typically more efficient and practical and allows for the use of a large sample. Fifth, standard instructions are given to all subjects and investigator bias is avoided (Ary et al., 1972:169-170).

The Organizational Survey Questionnaire, which was designed for the purposes of this study, was organized into three sections. These sections focused on (1)

organizational characteristics, (2) satisfaction with the job situation and overall satisfaction, and (3) background data on respondents.

The questionnaire was first developed in English and later translated into Thai. Only the Thai version was used in data collection. To ensure that consistency existed between the Thai and the English versions, three graduate students from Thailand at the University of Alberta were requested to translate the Thai version of the questionnaire back to English without a previous review of the original English version. Copies of the English and Thai versions of the questionnaire are included in Appendix C.

**Section One: Organizational Characteristics**

The items in this section were adapted from the organizational inventory developed by Hall (1961) and from the School Organizational Inventory developed by MacKay (1964) as modified by MacKay and Robinson (1966). This section contains sixty-two items which refer to six dimensions of bureaucratic characteristics of an organization. Each of these dimensions was treated as a separate continuum. The meanings of the six dimensions are as follows (Hall, 1977:147):

1. The hierarchy of authority -- the extent to which the locus of decision making is prestructured by the organization.
2. Division of labor -- the extent to which work tasks are subdivided by functional specialization decided by the organization.
3. Presence of rules -- the degree to which the behavior of organizational members is subject to organizational control.
4. Procedural specifications -- the extent to which organizational members must follow organizationally defined techniques in dealing with situations which they encounter.
5. Impersonality -- the extent to which both organizational members and outsiders are treated without regard to individual qualities.
6. Technical competence -- the extent to which organizationally defined "universalistic" standards are utilized in the personnel selection and advancement process.

All respondents were asked to indicate <u>how frequently</u> each action or behavior occurred in their own organization. Each item had a five-point response scale of "never," "seldom," "occasionally," "often," and "always."

**Section Two: Satisfaction with the Job Situation**

This section of the questionnaire was developed by the researcher. Aspects of satisfaction with the job situation were related to the same six dimensions of bureaucratic characteristics referred to in Section One. In addition, the overall satisfaction -- satisfaction with organization functions and satisfaction with the job -- were included. This section contained fourteen items. Each dimension in this section consisted of two items. The last two items pertained to overall satisfaction. All respondents were asked to indicate how satisfied they were with various aspects of their job situation. Each item had a six-point response scale of "highly dissatisfied," "moderately dissatisfied," "slightly dissatisfied," "slightly satisfied," "moderately satisfied," and "highly satisfied."

**Section Three: Background Data**

This section was developed by the researcher. Eleven items were designed to obtain personal data from the respondents. These items contained eleven different statements. The first two statements were about sex and age. The remaining eight questions were about the present position, the former position, and years of experience. The last question was about the level of education attained.

**Pilot-test of the Questionnaire**

Scates and Yeomans (1950, cited in Good, 1963:282) suggested that the validity of a questionnaire and its parts may be judged by asking: "Is the question perfectly clear and unambiguous?" In an effort to enhance the validity of the questionnaire, a pilot test was carried out. Two OPPECs were chosen at random from the population for the pilot test. The purpose of the pilot test was to examine the clarity of the questionnaire. Some items might need to be re-worded, some items might need to be modified, or some items might need to be discarded or substituted, depending upon the results of the pilot test.

Two investigators distributed the questionnaire for pilot testing on behalf of the researcher to thirty-one participants at the Offices of the Provincial Primary Education

Commissions (OPPECs) in the Provinces of Rayong and Trang, Thailand. There were sixteen and fifteen participants in the OPPECs of Rayong and Trang, respectively. The participants reviewed the questionnaire to check for lack of clarity in instructions, ambiguous content of items, and the appropriateness of the rating scale. Their comments were written in the margin next to whatever item was not clear or in the space provided in the last section of the questionnaire. Furthermore, some of the participants were interviewed for additional comments and for clarification of their written comments. From these comments and recommendations, final revisions were made in the questionnaire. The revised questionnaire was then used to collect data for this study.

## Validity

Validity of measurement refers to the extent to which the instrument measures what it purports to measure. Scates and Yeomans (1950, cited in Good, 1963:282) proposed the following points for judging the validity of a questionnaire:

(1) Is the questionnaire on the subject?
(2) Is the question perfectly clear and unambiguous?
(3) Does the questionnaire get at something stable, which is typical of the individual or of the situation?
(4) Does the question pull or have extractive power? Will it be answered by a large enough proportion of respondents to have validity?
(5) Is the information consistent, in agreement with what is known, and in agreement with expectancy?
(6) Is the item sufficiently inclusive?

If these questions can be answered in the affirmative, then validity can be claimed for the questionnaire used in this study. The pilot test demonstrated that indeed they can be so answered. The questionnaire was designed to deal with bureaucratic characteristics and was adapted from well known sources. High reliability is claimed for Hall's organizational inventory, and the instrument is widely accepted. All items covered information which the researcher needed. A pilot test was undertaken to identify ambiguous items. In the study itself, data were obtained from about one-third of the population. Various sizes of organizations were included. Respondents exhibited

different demographic characteristics. They indicated that they were willing to answer questions and that they had enough information to complete the questionnaire without seeking information from external sources.

**Reliability**

Reliability refers to the extent to which an instrument is consistent in measuring whatever it measures. Ary et al., (1985:357) proposed that one procedure for assessing reliability of the questionnaire is to check for consistency of results. Internal consistency of an instrument may be checked by several methods: (1) items may be rephrased and repeated in the same questionnaire, (2) repeat questionnaires may be administered to the same individuals after a period of time has elapsed, (3) two different forms of the questionnaire may be administered to the same individuals. In practice, it is expensive, time-consuming, and not easy to find subjects willing answer the questionnaire on a repeated administration. However, reliability may be assessed through a single administration of one form of a questionnaire by using split-half procedures (Ary et al., 1985:231).

The split-half correlation is the most widely used method of estimating internal consistency. In this technique, items are divided into two comparable halves. The scores of the two sets are then computed for each individual, and these two sets of scores are correlated. A high correlation indicates that each subject has a very similar position on the two sections or that all the items on the instrument appear to be measuring the same thing.

This study used the split-half method, described above, to test the reliability of section one (organizational characteristics) and section two (satisfaction with the job satisfaction) of the questionnaire.

## B. POPULATION AND SAMPLE

### The Population

Administrators and supervisors in the 73 Offices of the Provincial Primary Education Commissions (OPPECs) in Thailand constituted the target population for the study. In total, there are 288 senior administrators (Directors, Assistant Directors, and Head Supervisors), and 146 administrators as Section Heads in the supervisory units (two Section Heads in each of the 73 provinces). In addition, there are about 850 supervisors working in the supervisory units. The list of provinces in which OPPECs are located and the number of schools and supervisors under the OPPECs is presented in Appendix B.

### The Sample

Three sizes of organization -- small, medium, and large -- were recognized in the sampling procedures. The number of supervisors and number of primary schools under the OPPEC of each province (Appendix B) were taken into account in selecting the OPPEC. As a result, a stratified sampling procedure was used to ensure representation in the sample by size of OPPEC. The following classification was adopted for stratification:

1. small size OPPEC -- having 7-10 supervisors and fewer than 250 schools (13 OPPECs);
2. medium size OPPEC -- having 11-14 supervisors and 251-500 schools (23 OPPECs);
3. large size OPPEC -- having 15-18 supervisors and above 500 schools (10 OPPECs).

The stratification procedure resulted in 13 small size, 24 medium size, and 10 large size OPPECs in the population.

Composition of the sample. Fifty percent of the OPPECs in each category were randomly selected which resulted in a sample of 24 OPPECs of which 7 were small size,

12 were medium size, and 5 were large size. Ninety-five senior administrators, 48 section heads and 280 supervisors were included in the sample. In addition, the OPPEC in Bangkok was included because of its unique characteristics: it is the capital city, it has the smallest number of schools (36 schools), and it has most of the large schools in Thailand.

As presented in Table 3.1 the sample included 448 respondents (35.1 percent) from 25 OPPECs (34.3 percent). The sample was comprised of 99 senior administrators (directors, assistant directors, head supervisors) (34.4 percent), 50 section heads (34.3 percent), and 299 supervisors (35.6 percent). Comparing the percentage of sample by position, 22.1 percent were senior administrators, 11.2 percent were section heads and 66.7 percent were supervisors.

To test whether the sample represented adequately the population, a chi-square test of frequencies (Ferguson, 1976:194-195) was used. Under the null hypothesis, the sample frequencies should not differ significantly from the population frequencies, using size of OPPEC and position. The relevant data are presented in Table 3.2 and Table 3.3. As indicated in these tables, the chi-square of 2.11 with three degrees of freedom and of 1.74 with two degrees of freedom are not statistically significant at the .50 and .30 level, respectively. The null hypotheses were accepted, and the sample was deemed to be representative of the population.

**Table 3.1**
**Distribution of Sample and of Returns of Questionnaire by Size of OPPEC and Position of Respondents**

| Size of OPPEC and Position of Respondents | Population | Sample | | Returns | |
|---|---|---|---|---|---|
| | N | N | % | N | % |
| Small | 22 | 7 | 31.8 | 7 | 100.0 |
| senior admin. | 84 | 27 | 32.1 | 23 | 85.2 |
| section head | 44 | 14 | 31.8 | 10 | 71.4 |
| supervisor | 226 | 70 | 31.0 | 70 | 100.0 |
| Total | 354 | 111 | 29.9 | 103 | 92.8 |
| Medium | 30 | 12 | 40.0 | 12 | 100.0 |
| senior admin. | 120 | 48 | 40.0 | 38 | 79.2 |
| section head | 60 | 24 | 40.0 | 20 | 83.3 |
| supervisor | 328 | 138 | 42.1 | 118 | 85.5 |
| Total | 508 | 210 | 41.4 | 176 | 83.8 |
| Large | 20 | 5 | 25.0 | 5 | 100.0 |
| senior admin. | 80 | 20 | 16.0 | 15 | 75.0 |
| section head | 40 | 10 | 25.0 | 6 | 60.0 |
| supervisor | 276 | 80 | 29.0 | 65 | 81.3 |
| Total | 396 | 110 | 27.8 | 86 | 78.2 |
| Bangkok | 1 | 1 | 100.0 | 1 | 100.0 |
| senior admin. | 4 | 4 | 100.0 | 2 | 50.0 |
| section head | 2 | 2 | 100.0 | 2 | 100.0 |
| supervisor | 11 | 11 | 100.0 | 8 | 72.7 |
| Total | 17 | 17 | 100.0 | 12 | 70.6 |
| Overall | 73 | 25 | 34.3 | 25 | 100.0 |
| senior admin. | 288 | 99 | 34.4 | 78 | 78.8 |
| section head | 146 | 50 | 34.3 | 38 | 76.0 |
| supervisor | 841 | 299 | 35.6 | 261 | 87.3 |
| Total | 1275 | 448 | 35.1 | 377 | 84.2 |

**Table 3.2**

**Chi-Square Test of Frequency in the Sample by Size of OPPEC**

| Size of OPPEC | Population N | Population % | Sample O | Sample % | E |
|---|---|---|---|---|---|
| Small | 22 | 30.14 | 7 | 28.00 | 7 |
| Medium | 30 | 41.10 | 12 | 48.00 | 10 |
| Large | 20 | 27.40 | 5 | 20.00 | 7 |
| Bangkok | 1 | 1.37 | 1 | 4.00 | 1 |
| Total | 73 | 100.00 | 25 | 100.00 | 25 |

Chi-Square = 2.11

Degree of Freedom = 3

$p > .50$

**Table 3.3**

**Chi-Square Test of Frequency in the Sample by Position of Respondents**

| Position of Respondents | Population N | Population % | Sample O | Sample % | E |
|---|---|---|---|---|---|
| Senior Admin. | 288 | 22.59 | 78 | 20.69 | 85 |
| Section Head | 146 | 11.45 | 38 | 10.08 | 43 |
| Supervisor | 841 | 65.96 | 261 | 69.23 | 249 |
| Total | 1275 | 100.00 | 377 | 100.00 | 377 |

Chi-Square = 1.74

Degree of Freedom = 2

$p > .30$

## C. DATA COLLECTION

The researcher approached the Department of Curriculum and Instruction Development (CID) in the Thai Ministry of Education to gain support for the study and to designate a project director from the Division of Educational Research (DER) of the CID to collect data on her behalf. The project director and an assistant were instructed to distribute copies of the questionnaire, collect them from the respondents and forward them to the researcher.

The researcher prepared a manual on data collection procedures, and oversea calls to Thailand were made to clarify data collection techniques with the representatives. The Thai version of the questionnaire was used to collect data. Copies of the questionnaire were printed in Thailand.

### Pilot Study

In August 1986, the researcher mailed a copy of both the Thai and English versions of the questionnaire, as well as the data collection manual to the project director. The manual contained guidelines about the (1) number and type of organizations for pilot testing, (2) respondents in the pilot study, (3) procedures for testing, and (4) format of the Thai questionnaire. Three weeks later, a telephone call was made to Thailand to verify that the project director clearly understood the researcher's directions. Copies of the Thai questionnaire were made at the DER. Two Offices of the Provincial Primary Education Commissions (OPPECs) were selected for the pilot study.

In September 1986, the project director and her assistant distributed questionnaires to the two OPPECs while they were on a trip to collect other data for the DER. These two OPPECs were in the Provinces of Rayong and Trang. There were 31 participants in the pilot study. All of the questionnaires, including comments and recommendations from the participants and the data collectors, were mailed back to the

researcher for analysis. Final revisions were made to the questionnaire in November 1986.

**Data from the Sample**

In November 1986, the researcher mailed a copy of the revised questionnaire (in both Thai and English), a data collection manual, a data coding manual, and instructions for distributing the questionnaire to the project director and her assistant, who were to collect data on behalf of the researcher.

In December 1986, the questionnaires were mailed from Thailand to the Directors of OPPECs with a letter of recommendation from the Director General of the Department of Curriculum and Instruction Development (the list of 25 OPPECs is included in Appendix B). The Director of each OPPEC was requested to distribute the questionnaires to the assistant directors, head supervisor, section heads and supervisors in his/her OPPEC and he/she also was requested to assign one of his/her subordinates to collect the questionnaires and mail them to the project director. About one week after distributing questionnaires to the respondents, the project director and her assistant contacted the Director of each OPPEC by telephone to explain the questionnaire and to clarify any points on which there was uncertainty.

A telephone follow up was carried out at ten-day intervals and another questionnaire was distributed when necessary. The follow up process continued from January 1987 until the second week of February 1987.

Data obtained from the respondents were coded on a computer coding sheet according to instructions provided by the researcher. Questionnaires which were not clear to the coder were duplicated and mailed to the researcher. Also, any other problems and comments from the data collectors and the coder were mailed to the researcher. The researcher received a copy of the coding sheet for the small size OPPECs in January 1987

and the remainder in March 1987. Telephone calls were made to clarify any ambiguous data or unclear coding.

The total number of returns was 377 (84.2 percent), comprised of 78 (78.8 percent) from senior administrators, 38 (76.0 percent) from section heads, and 261 (87.3 percent) from supervisors. Details of returns are shown in Table 3.1.

## D. ANALYSIS OF DATA

Descriptive statistics and tests of significance were used to analyse data. The analysis was divided into two parts: (1) analysis of the pilot study data, and (2) analysis of data from the sample.

### Analysis of the Pilot Study

The purpose of the pilot test was to assess appropriateness of the questionnaire items and clarity of the wording. Comments and recommendations provided by respondents were analysed and used as the basis for revising the questionnaire. The results of the pilot study were as follows:

1. Seven respondents (27.58 percent) made general comments indicating that some items were not clear, some items were not understood, and some items were too difficult to rate. These respondents did not, however, identify the problem items.

2. Three respondents (9.68 percent) commented that item 28 was not clear and they could not understand it.

3. Two respondents (6.45 percent) commented that items 7, 21, and 22 were not clear.

4. One respondent (3.23 percent) commented that items 6, 14, 17, 19, 20, 23, 31, 37, 42, 49, 57, and 59 were not clear.

Based on analysis of data from the pilot study, no items were discarded or substituted. Most items in the Thai version were re-worded slightly. Item 31 was

modified by changing it from a negative sentence to an affirmative sentence in order to make it more understandable in the Thai language.

**Analysis of Data From the Sample**

Data analyses were carried out using six different statistical techniques. These techniques included factor analysis, the t-test, one-way analysis of variance, Scheffé method of multiple comparisons, the Pearson product-moment correlation, and stepwise multiple regression analysis. The techniques were applied to analyse data as follows:

1. The data from section one (Organizational Characteristics) and section two (Satisfaction with the Job Situation) were factor analyzed. The data from section three of the questionnaire were analysed using frequency distributions.

2. The t-test was used to test the significance of correlation coefficients.

3. One-Way Analysis of Variance was used to test for statistical significance in comparing the organizational characteristics, satisfaction with the job situation, and overall satisfaction by the size of organization and by the respondent's position in the organization. The independent variables were size of organization and position in the organization, and the dependent variables were scale scores obtained from the factor analysis of items in section one and section two of the questionnaire.

4. Significant differences determined from the One-Way Analysis of Variance were identified using the Scheffé method of multiple means comparisons. The level of significance of .10 was set to test a difference between two means.

5. The Pearson product-moment correlation coefficient was used to determine the relationship between bureaucratic dimensions and satisfaction with the job situation as well as with overall satisfaction. Correlation coefficients were calculated in terms of (a) relationship in total sample, (b) relationship by the size of organization, and (c) relationship by the position in the organization.

6. The stepwise multiple regression analysis was used to determine predictors of satisfaction with the job situation and overall satisfaction in terms of (a) total sample, (b) size of organization, and (c) position in the organization.

## E. PROFILE OF THE RESPONDENTS

Characteristics of the respondents were obtained from the background data collected in section three of the questionnaire. In this section, four different sets of information were reported: (1) sex, age, and level of education of respondents, (2) their present work experience, (3) their previous work experience, and (4) their work experience in the Ministry of the Interior (MOI).

### Sex, Age, and Level of Education

The frequency and percentage distributions of respondents by sex, age, and level of education of all OPPECs are presented in Table 3.4. More detailed presentations -- by small, medium, and large size OPPECs, and the OPPEC in Bangkok -- have been included in Tables D.3.1 to D.3.4 in Appendix D.

#### Sex

The frequency and percentage of respondents by sex in all OPPECs are presented in Table 3.4: (1) 77 percent were male and 23 percent were female, and (2) by position, 95 percent of senior administrators, 87 percent of section heads, and 71 percent of supervisors were male.

#### Age

As presented in Table 3.4, 73 percent of the respondents were between 36 - 50 years old (about 24 percent in each of three age categories), 12 percent were younger than 36 years old, and 15 percent were older than 50 years old. The distribution shows that most of respondents in the higher positions were older than those in the lower position --

33 percent, 18 percent, and 9 percent of senior administrators, section heads, and supervisors, respectively, were over 50 years of age.

**Table 3.4**
**Distribution of Respondents in All OPPECs by Sex, Age, and Level of Education**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| **Total** | **78** | **100.0** | **38** | **100.0** | **261** | **100.0** | **377** | **100.0** |
| Sex | | | | | | | | |
| male | 74 | 94.9 | 33 | 86.8 | 184 | 70.5 | 291 | 77.2 |
| female | 3 | 3.8 | 5 | 13.2 | 77 | 29.5 | 85 | 22.5 |
| no answer | 1 | 1.3 | - | - | - | - | 1 | 0.3 |
| Age | | | | | | | | |
| 26 - 30 | - | - | - | - | 6 | 2.3 | 6 | 1.6 |
| 31 - 35 | - | - | - | - | 39 | 14.9 | 39 | 10.3 |
| 36 - 40 | 2 | 2.6 | 4 | 10.5 | 82 | 31.4 | 88 | 23.3 |
| 41 - 45 | 22 | 28.2 | 15 | 39.5 | 66 | 25.3 | 103 | 27.3 |
| 46 - 50 | 28 | 35.9 | 12 | 31.6 | 44 | 16.9 | 84 | 22.3 |
| 51 - 55 | 10 | 12.8 | 4 | 10.5 | 21 | 8.0 | 35 | 9.3 |
| 56 - 60 | 16 | 20.5 | 3 | 7.9 | 3 | 1.1 | 22 | 5.8 |
| Level of Education | | | | | | | | |
| B.A. | 5 | 6.4 | - | - | 8 | 3.1 | 13 | 3.4 |
| B.Sc. | - | - | - | - | 8 | 3.1 | 8 | 2.1 |
| B.Ed. | 44 | 56.4 | 26 | 68.4 | 196 | 75.1 | 266 | 70.6 |
| two Bachelor's degrees | 2 | 2.6 | - | - | 6 | 2.3 | 8 | 2.1 |
| M.A. | - | - | 1 | 2.6 | 4 | 1.5 | 5 | 1.3 |
| M.Sc. | - | - | 1 | 2.6 | 1 | 0.4 | 2 | 0.5 |
| M.Ed. | 23 | 29.5 | 7 | 21.1 | 37 | 14.2 | 68 | 18.0 |
| no answer | 4 | 5.1 | 2 | 5.3 | 1 | 0.4 | 7 | 1.9 |

Level of education

Presented in Table 3.4 are the levels of education reported by the respondents in all OPPECs. The Table shows that 71 percent held B.Ed. degrees and 18 percent held M.Ed. degrees, and most of the respondents in each position -- 56 percent of senior administrators, 68 percent of section heads, and 75 percent of supervisors -- held the B.Ed. degrees.

**Present Work Experience**

The distributions of years of experience of the respondents in their present positions and in their present OPPECs are summarized in Tables 3.5 and 3.6, respectively.

Year of experience in the present position

Table 3.5 presents years of experience in the present position in all OPPECs, each OPPEC size and each position in OPPECs. In all OPPECs, 16 percent reported less than 2 years of experience, 33 percent had 2 - 5 years of experience, 30 percent had 6 - 10 years, 7 percent had 11 - 15 years, and 9 percent had over 15 years of experience. Though the position was accounted for, the percentage of years of experience in the present position of senior administrators, section heads, and supervisors were similar to the results of all OPPECs.

Years of experience in the present OPPEC

Years of experience in present OPPEC of members of all OPPECs, each OPPEC size, and each position in OPPECs are presented in Table 3.6. The results show that in all OPPECs, 11 percent had experience of less than 2 years, 22 percent had 2 - 5 years of experience, 51 percent had 6 - 10 years, and 13 percent had experience more than 10 years. In each position: (1) 42 percent of senior administrators had experience in the present OPPEC less than 2 years, 26 percent and 30 percent had experience 2 - 5 and 6 -

**Table 3.5**

**Distribution of Years of Experience of Respondents in Present Position by Size of OPPEC and Position of Respondents**

| Size of OPPEC and Position of Respondents | 1 or less | | 2-5 | | 6-10 | | 11-15 | | 16-20 | | 21-25 | | 26 or more | | no answer | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | f | % | f | % | f | % | f | % | f | % | f | % | f | % |
| Small | | | | | | | | | | | | | | | | |
| senior admin. | 9 | 39.1 | 5 | 21.7 | 5 | 21.7 | 1 | 4.3 | - | - | 3 | 12.9 | - | - | - | - |
| section head | 3 | 30.0 | 3 | 30.0 | 2 | 20.0 | 1 | 10.0 | - | - | 1 | 10.0 | - | - | - | - |
| supervisor | 17 | 24.3 | 20 | 28.6 | 16 | 22.3 | 7 | 10.0 | 1 | 1.4 | 2 | 2.9 | - | - | 7 | 10.0 |
| Total | 29 | 28.1 | 28 | 27.2 | 23 | 22.3 | 9 | 8.8 | 1 | 1.0 | 6 | 5.9 | - | - | 7 | 6.8 |
| Medium | | | | | | | | | | | | | | | | |
| senior admin. | 4 | 10.5 | 14 | 36.8 | 16 | 42.1 | 3 | 7.9 | - | - | - | - | 1 | 2.6 | - | - |
| section head | 2 | 10.0 | 6 | 30.0 | 7 | 35.0 | - | - | 2 | 10.0 | 3 | 15.0 | - | - | - | - |
| supervisor | 11 | 9.3 | 53 | 44.9 | 26 | 22.0 | 9 | 7.6 | 7 | 5.9 | 7 | 5.9 | 1 | 0.8 | 4 | 3.4 |
| Total | 17 | 9.6 | 73 | 41.5 | 49 | 27.9 | 12 | 6.7 | 9 | 5.1 | 10 | 5.6 | 2 | 1.1 | 4 | 2.3 |

continued

**Table 3.5 (continued)**

| Size of OPPEC and Position of Respondents | 1 or less | | 2-5 | | 6-10 | | 11-15 | | 16-20 | | 21-25 | | 26 or more | | no answer | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | f | % | f | % | f | % | f | % | f | % | f | % | f | % |
| Large | | | | | | | | | | | | | | | | |
| senior admin. | 1 | 6.7 | 11 | 73.3 | 3 | 20.0 | - | - | - | - | - | - | - | - | - | - |
| section head | 1 | 16.7 | 1 | 16.7 | 4 | 66.7 | - | - | - | - | - | - | - | - | - | - |
| supervisor | 5 | 7.7 | 12 | 18.5 | 32 | 49.2 | 7 | 10.8 | 4 | 6.1 | 2 | 3.1 | 1 | 1.5 | 2 | 3.1 |
| Total | 7 | 8.1 | 24 | 27.9 | 39 | 45.4 | 7 | 8.3 | 4 | 4.6 | 2 | 2.4 | 1 | 1.2 | 2 | 2.3 |
| Bangkok | | | | | | | | | | | | | | | | |
| senior admin. | 1 | 50.0 | 1 | 50.0 | - | - | - | - | - | - | - | - | - | - | - | - |
| section head | 2 | 100.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| supervisor | 6 | 75.0 | - | - | 2 | 25.0 | - | - | - | - | - | - | - | - | - | - |
| Total | 9 | 75.0 | 1 | 8.3 | 2 | 16.7 | - | - | - | - | - | - | - | - | - | - |
| Overall | | | | | | | | | | | | | | | | |
| senior admin. | 15 | 19.3 | 31 | 39.7 | 24 | 30.8 | 4 | 5.2 | - | - | 3 | 3.9 | 1 | 1.3 | - | - |
| section head | 8 | 21.1 | 10 | 26.4 | 13 | 34.3 | 1 | 2.6 | 2 | 5.2 | 4 | 10.4 | - | - | - | - |
| supervisor | 39 | 14.9 | 85 | 32.5 | 76 | 29.0 | 23 | 8.8 | 12 | 4.4 | 11 | 4.2 | 2 | 0.8 | 13 | 5.0 |
| Total | 62 | 16.4 | 126 | 33.4 | 113 | 29.9 | 28 | 7.4 | 14 | 3.8 | 18 | 4.8 | 3 | 0.8 | 13 | 3.4 |

**Table 3.6**

**Distribution of Years of Experience of Respondents in Present OPPEC by Size of OPPEC and Position of Respondents**

| Size of OPPEC and Position of Respondents | 1 or less | | 2-5 | | 6-10 | | 11-15 | | 16-20 | | 21-25 | | 26 or more | | no answer | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | f | % | f | % | f | % | f | % | f | % | f | % | f | % |
| Small | | | | | | | | | | | | | | | | |
| senior admin. | 13 | 56.5 | 3 | 13.0 | 6 | 26.0 | - | - | 1 | 4.3 | - | - | - | - | - | - |
| section head | - | - | 2 | 20.0 | 6 | 60.0 | - | - | 1 | 10.0 | 1 | 10.0 | - | - | - | - |
| supervisor | 4 | 5.7 | 14 | 20.0 | 37 | 52.9 | 6 | 8.6 | 1 | 1.4 | 3 | 4.3 | 1 | 1.4 | 4 | 5.7 |
| Total | 17 | 16.6 | 19 | 18.4 | 49 | 47.6 | 6 | 5.8 | 3 | 3.0 | 4 | 4.0 | 1 | 1.0 | 4 | 4.0 |
| Medium | | | | | | | | | | | | | | | | |
| senior admin. | 12 | 31.6 | 13 | 34.2 | 12 | 31.6 | - | - | - | - | - | - | - | - | 1 | 2.6 |
| section head | - | - | 2 | 10.0 | 16 | 80.0 | - | - | 1 | 5.0 | - | - | - | - | 1 | 5.0 |
| supervisor | 4 | 3.4 | 29 | 24.6 | 58 | 49.2 | 11 | 9.3 | 7 | 5.9 | 5 | 4.2 | 1 | 0.8 | 3 | 2.5 |
| Total | 16 | 9.1 | 44 | 24.9 | 86 | 48.9 | 11 | 6.2 | 8 | 4.6 | 5 | 2.9 | 1 | 0.6 | 5 | 2.8 |

continued

**Table 3.6 (continued)**

| Size of OPPEC and Position of Respondents | 1 or less | | 2-5 | | 6-10 | | 11-15 | | 16-20 | | 21-25 | | 26 or more | | no answer | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | f | % | f | % | f | % | f | % | f | % | f | % | f | % |
| Large | | | | | | | | | | | | | | | | |
| senior admin. | 7 | 46.7 | 4 | 26.7 | 4 | 26.7 | - | - | - | - | - | - | - | - | - | - |
| section head | - | - | 1 | 16.7 | 5 | 83.3 | - | - | - | - | - | - | - | - | - | - |
| supervisor | 2 | 3.1 | 10 | 15.4 | 44 | 67.7 | 3 | 4.6 | 3 | 4.6 | 2 | 3.1 | 1 | 1.5 | - | - |
| Total | 9 | 10.5 | 15 | 17.4 | 53 | 61.6 | 3 | 3.6 | 3 | 3.6 | 2 | 2.4 | 1 | 1.2 | - | - |
| Bangkok | | | | | | | | | | | | | | | | |
| senior admin. | 1 | 50.0 | - | - | 1 | 50.0 | - | - | - | - | - | - | - | - | - | - |
| section head | - | - | 1 | 50.0 | 1 | 50.0 | - | - | - | - | - | - | - | - | - | - |
| supervisor | - | - | 6 | 75.0 | 2 | 25.0 | - | - | - | - | - | - | - | - | - | - |
| Total | 1 | 8.3 | 7 | 58.3 | 4 | 33.3 | - | - | - | - | - | - | - | - | - | - |
| Overall | | | | | | | | | | | | | | | | |
| senior admin. | 33 | 42.3 | 20 | 25.6 | 23 | 29.5 | - | - | 1 | 1.3 | - | - | - | - | 1 | 1.3 |
| section head | - | - | 6 | 15.8 | 28 | 73.7 | - | - | 2 | 5.3 | 1 | 2.6 | - | - | 1 | 2.6 |
| supervisor | 10 | 3.8 | 59 | 22.6 | 141 | 54.1 | 20 | 7.7 | 11 | 4.2 | 10 | 3.9 | 3 | 1.1 | 7 | 2.7 |
| Total | 43 | 11.4 | 85 | 22.4 | 192 | 50.9 | 20 | 5.3 | 14 | 3.6 | 11 | 2.9 | 3 | 0.8 | 9 | 2.4 |

10 years, respectively; (2) 16 percent of section heads had experience 2 - 5, 74 percent had 6 - 10 years of experience and 8 percent had worked at OPPECs over 10 years; and (4) 4 percent of supervisors had less than 2 years of experience, 23 percent had 2 - 5 years of experience, 54 percent had 6 - 10, and 17 percent had experience more than 10 years.

**Previous Work Experience**

Perceptions of respondents were used to assess the characteristics of bureaucracy of their organization and their satisfaction with the job situation. It was anticipated that previous work experience of the respondents might provide additional information to interpret and discuss the results of the study. The information on previous work experience of the respondents in all OPPECs is presented in Table 3.7; a more detailed analysis, by different sizes of OPPECs, is presented in Tables D.3.5 to D.3.8 in Appendix D.

Previous position of the respondents

Presented in Table 3.7 are the previous position of the respondents in all OPPECs. The Table shows that in all OPPECs, 40 percent of previous position of the respondents were teacher and 19 percent were supervisor. Twenty-four percent of senior administrators had worked as educational administrators or educational officers in the district/province, 19 percent were assistant directors, and 15 percent were section heads in the supervisory units. The previous position of section heads were supervisor (40 percent), teacher (26 percent), and section head in the supervisory units (18 percent). The previous position of supervisors were teacher (53 percent) and supervisor (18 percent).

Table 3.7

Distribution of Respondents in All OPPECs by Previous Position and Years of Experience

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| **Total** | **78** | **100.0** | **38** | **100.0** | **261** | **100.0** | **377** | **100.0** |
| Previous Position | | | | | | | | |
| director | 7 | 9.0 | - | - | - | - | 7 | 1.9 |
| assistant director | 15 | 19.2 | - | - | - | - | 15 | 4.0 |
| head supervisor | 7 | 9.0 | - | - | 1 | 0.4 | 8 | 2.1 |
| section head in supervisory unit | 12 | 15.4 | 7 | 18.4 | 10 | 3.8 | 29 | 7.7 |
| section head but not in supervisory unit | 2 | 2.6 | 1 | 2.6 | 3 | 1.1 | 6 | 1.6 |
| supervisor | 8 | 10.3 | 15 | 39.5 | 47 | 18.0 | 70 | 18.6 |
| principal | 7 | 9.0 | 3 | 7.9 | 29 | 11.1 | 39 | 10.3 |
| teacher | 1 | 1.3 | 10 | 26.3 | 139 | 53.3 | 150 | 39.8 |
| other | 19 | 24.4 | 2 | 5.3 | 30 | 11.5 | 51 | 13.5 |
| no answer | - | - | - | - | 2 | 0.8 | 2 | 0.5 |
| Years of Previous Experience | | | | | | | | |
| 1 or less | 3 | 3.9 | 1 | 2.6 | 18 | 6.9 | 22 | 5.8 |
| 2 - 5 | 27 | 34.6 | 8 | 21.1 | 84 | 32.2 | 119 | 31.6 |
| 6 - 10 | 26 | 33.3 | 19 | 50.0 | 61 | 23.3 | 106 | 28.1 |
| 11 - 15 | 5 | 6.5 | 2 | 5.2 | 50 | 19.1 | 57 | 15.1 |
| 16 - 20 | 10 | 12.8 | 5 | 13.1 | 24 | 9.2 | 39 | 10.5 |
| 21 - 25 | 3 | 3.9 | 2 | 5.2 | 12 | 4.6 | 17 | 4.6 |
| 26 or more | 1 | 1.3 | - | - | 3 | 1.2 | 4 | 1.0 |
| no answer | 3 | 3.8 | - | - | 9 | 3.4 | 13 | 3.4 |

Year of experience in the previous position

Table 3.7 shows that in all OPPECs, most of the respondents (32 percent and 28 percent) had 2 - 5 and 6 - 10 years of previous experience.

In particular:

(1) 34 percent of senior administrators had 2 - 5 years of experience as well as 6 - 10 years;

(2) 21 percent and 50 percent of section heads had 2 - 5 and 6 - 10 years of experience, respectively;

(3) 32 percent and 23 percent of supervisors had 2 - 5 and 6 - 10 years of experience, respectively.

A more detailed presentations, for different sizes of OPPECs, is reported in Tables D.3.5 to D.3.8 in Appendix D.

**Work Experience in the Ministry of the Interior**

During the fifteen years from 1966 to 1980, primary education in Thailand was administered by the Ministry of the Interior (MOI). In 1980, this responsibility was transferred back to the Ministry of Education (MOE). At this time the staff, especially directors and assistant directors, were also transferred to the MOE. For this reason, information about work experience in the MOI might be helpful in explaining the perceptions of respondents about the organizational characteristics of the supervisory units in Thailand and their satisfaction. The work experience of respondents in the MOI for all OPPECs is reported in Table 3.8. A more detailed presentation, for different sizes of OPPECs, is reported in Tables D.3.9 to D.3.12 in Appendix D.

The results presented in Table 3.8 indicate that the percentage of respondents in all OPPECs who had worked under the MOI (54 percent) and who had not (46 percent) was approximately the same. Sixty-three percent of senior administrators and 55 percent of supervisors had worked under the MOI whereas 71 percent of section heads had not

**Table 3.8**
**Distribution of Respondents in all OPPEC by Work Experience, Position, and Years of Experience in the MOI**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| Work Experience | | | | | | | | |
| yes | 49 | 62.8 | 11 | 28.9 | 143 | 54.8 | 203 | 53.8 |
| no | 29 | 37.2 | 27 | 71.1 | 118 | 45.2 | 174 | 46.2 |
| Total | 78 | 100.0 | 38 | 100.0 | 261 | 100.0 | 377 | 100.0 |
| Position | | | | | | | | |
| chief executive of province or assistant | 18 | 36.7 | - | - | 3 | 2.1 | 21 | 10.3 |
| chief executive of district or assistant | 8 | 16.3 | - | - | 2 | 1.4 | 10 | 4.9 |
| educational officer | 3 | 6.1 | 2 | 18.2 | 9 | 6.3 | 14 | 6.9 |
| supervisor | 3 | 6.1 | 2 | 18.2 | 5 | 3.5 | 10 | 4.9 |
| principal | 10 | 20.4 | 4 | 36.4 | 20 | 14.0 | 34 | 16.7 |
| teacher | 2 | 4.1 | 1 | 9.1 | 95 | 66.4 | 98 | 48.3 |
| other | 5 | 10.2 | 2 | 18.2 | 9 | 6.3 | 16 | 7.9 |
| Total | 49 | 100.0 | 11 | 100.0 | 143 | 100.0 | 203 | 100.0 |
| Years of Previous Experience | | | | | | | | |
| 1 or less | - | - | - | - | 2 | 1.4 | 2 | 0.5 |
| 2 - 5 | 7 | 14.3 | 3 | 27.3 | 32 | 22.4 | 42 | 20.7 |
| 6 - 10 | 15 | 30.6 | 3 | 27.3 | 49 | 34.3 | 67 | 33.0 |
| 11 - 15 | 23 | 46.9 | 5 | 45.4 | 49 | 34.3 | 78 | 38.4 |
| 16 - 20 | 2 | 4.1 | - | - | 4 | 2.8 | 6 | 3.0 |
| 21 - 25 | 2 | 4.1 | - | - | - | - | 2 | 1.0 |
| 26 or more | - | - | - | - | - | - | - | - |
| no answer | - | - | - | - | 7 | 4.9 | 6 | 3.2 |
| Total | 49 | 100.0 | 11 | 100.0 | 143 | 100.0 | 203 | 100.0 |

worked in the MOI. Only in OPPEC Bangkok that more supervisors had not worked under the MOI (88 percent).

Position under the MOI

Table 3.8 shows that in all OPPECs, 48 percent and 17 percent of respondents had worked as teachers and principals under the MOI, respectively. Senior administrators reported that 37 percent, 20 percent, and 16 percent had worked as chief executives of province or assistants, principals, and chief executives of district or assistants, respectively. Thirty-six percent of section heads had worked as principals and 18 percent had worked as educational officers as well as 18 percent had work as supervisors. Sixty-six percent of supervisors had worked as teachers and only 14 percent had worked as principals.

Years of Previous Experience in the MOI

Table 3.8 presents years of previous experience in the MOI of respondents in all OPPECs. As shown in the Table, most of respondents (21 percent to 38 percent) reported that they had 2 - 5, 6 - 10, and 11 - 15 years of previous experience. Most of senior administrators and section heads (47 percent and 45 percent) had 11 - 15 years of previous experience, and most of supervisors (34 percent) had 6 - 10 years of previous experience as well as 11 - 15 years of previous experience.

## F. SUMMARY

In this chapter, the following topics were addressed: the process of instrument development, population and sampling techniques, procedures of data collection, analysis of data, and characteristics of the respondents.

The questionnaire was adapted from the School Organizational Inventory by MacKay (1964) and by MacKay and Robinson (1966). The questionnaire was organized

in three sections. Section One contained sixty-two items designed to measure organizational characteristics. Section Two contained fourteen items; twelve items were designed to examine satisfaction with the job situation and the other two items were used to measured overall satisfaction.

A pilot-test of the questionnaire was carried out in two Offices of the Provincial Primary Education Commissions (OPPECs) in Thailand. The questionnaire was then revised. Procedures employed to determine validity and reliability of the questionnaire were described. The revised questionnaire was used to collect data from 25 OPPECs. The total number of respondents in the sample was 377 comprised of 78 senior administrators (directors, assistant directors, head supervisors), 38 section heads, and 261 supervisors.

Data were coded on a computer coding sheet and mailed to the researcher for analysis. Several techniques were used to analyse data. Factor analysis, one-way analysis of variance, the Pearson product-moment correlation coefficient and stepwise multiple regression analysis were applied to the analysis of data from Sections One and Two of the questionnaire. Finally, personal data of respondents were reported.

# CHAPTER 4

# DEFINING SCALES FOR ORGANIZATIONAL CHARACTERISTICS AND SATISFACTION

Results of the factor analyses are presented in this chapter. Items in both section one (organizational characteristics) and section two (satisfaction with the job situation) of the Organization Survey Questionnaire (OSQ) were factor analysed. In addition to reporting the factor analyses, the intercorrelations among scales are presented in the final section.

## A. ANALYTICAL PROCEDURES

Factor analysis is a technique for reducing a large number of variables to a smaller number of variables (factors) and for determining what variables can be grouped together rather than studied separately. In this study, factor analysis was used to assist with defining the scales for describing organizational characteristics and satisfaction with the job situation.

Kerlinger (1967;670) pointed out that there are a number of rotational methods in factor analysis, but the two main types of rotation are called "orthogonal" and "oblique." Kerlinger (1967:670) stated that "Orthogonal rotations maintain the independence of factors." He also stated that

> Obliqueness, of course, means that factors are correlated. There is no doubt that factor structures can be better fitted with oblique axes and the simple structure criteria better satisfied.

Harman (1976:259) concurred with Kerlinger (1967) that the oblique solution should be applied when factors are likely correlated.

Earlier studies have shown that bureaucratic characteristics are correlated (see MacKay, 1964:74-76; Robinson, 1966:117-119; Richert, 1968:53-54: Hoy and Miskel,

1982:92-95). Therefore, the oblique rotation in factor analysing the two sets of variables of organizational characteristics and satisfaction with the job situation was used.

Several issues related to the use of factor analysis should be considered. How many factors should be included in a factor solution? How is the researcher to identify the items (variables) which belong to a factor? How is one to deal with items which load on more than one factor?

To determine the number of factors in the factor solution, the Kaiser criterion was used. Thorndike (1978:273) reported that

> The most widely known and used criterion for the number of factors is what is known as the Kaiser criterion (Kaiser, 1960). This approach is based on a principal components analysis (unreduced correlation matrix) and advocates retaining only those factors that have *eigenvalues* greater than 1.0. This means that for a factor to be retained, it must account for at least as much variance as does a single variable, a requirement that has substantial intuitive appeal.

Accordingly, this study used the Kaiser criterion -- eigenvalues greater than 1.0 -- as a basis for deciding which factors should be included in the factor solutions.

To identify items which belong to a factor, two criteria are usually considered: factor loadings and items which contribute logically to the meaning of the factor. Thorndike (1978:328) stated that

> The most popular method of determining which factor loading to consider for interpretation is to set up an arbitrary cut-off value (generally .3, .4, or .5) and retain for interpretation only those loadings that exceed the selected value, calling the rest zero.

Cattell (1952:33), Dubois (1965:466), White and Hall (1970:340), and Myroon (1982:81) concurred with Thorndike (1978) that only items with factor loadings greater than |.30| should be used.

Though factor loadings may be greater than the cut-off value, researchers have to justify the inclusion of items by using their own judgement as to whether the item can be meaningfully interpreted in terms of a particular factor. Only items which contribute

logically to the meaning of the factor are usually included (Jankovic, 1983:119; Hewitson, 1975:133).

If any items load highly (greater than the cut-off value) on more than one factor, a cross-loading difference has to be considered. Myroon (1982:81-82) used a cross-loading difference of more than .10 as one of the criteria to use in selecting items which load on more than one factor.

Consistent with these conventional practices, this study used the following criteria to decide which items contribute to the meaning of a factor:

1. Item loadings on a factor should be greater than or equal to |0.35|.
2. Items should load decisively on one factor. If an item loads greater than or equal to |0.35| on more than one factor, a cross-loading difference should be greater than or equal to |0.10|.
3. Items included in a factor should contribute logically to the meaning of the factor.

All items included in a factor have to meet these criteria. Items were discarded if they did not satisfy all of the criteria.

## B. RESULTS OF THE FACTOR ANALYSIS OF ORGANIZATIONAL CHARACTERISTICS

The 62 items developed to measure organizational characteristics were analysed using principal components analysis with oblique rotation. Analyses with six, seven and eight-factor solutions were conducted. Attempts were made to interpret the factors emerging from these three different solutions. The six-factor solution was rejected because the factor loadings were not strong enough. The eight-factor solution was also rejected, not because of the strength of the factor loadings, but because items in some of the factors did not contribute logically to the meaning of the factor which reduced some

factors to only one or two items. The seven-factor solution was adopted because it was the most interpretable and also resulted in a minimum of three items in each of the seven factors. The seven-factor solution is presented in Table 4.1. Details are presented in Table D.4.1 in Appendix D. Factor loadings greater than or equal to |0.35| are identified in the table. Sixteen items were discarded because they did not meet the criteria.

**Table 4.1**
**Results of Factor Analysis of Organizational Characteristics: Seven-Factor Solution**

| Category | Factors 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Eigenvalue | 8.61 | 4.98 | 3.07 | 1.94 | 1.69 | 1.62 | 1.52 |
| Total Variance (%) | 13.90 | 8.00 | 5.00 | 3.10 | 2.70 | 2.60 | 2.50 |
| Common Variance (%) | 36.76 | 21.26 | 13.11 | 8.28 | 7.22 | 6.92 | 6.49 |
| Sum of Communalities | | | | 23.43 | | | |
| Total Variance (%) Accounted For | | | | 37.80 | | | |

As shown in Table 4.1, the variance of the factors ranges from 8.61 to 1.52; the first factor has the largest eigenvalue, the second factor has the next largest eigenvalue, and each additional factor has a still smaller eigenvalue. This means that the early factors are the most important, they account for more of the variance in the set of variables than do later factors (Thorndike, 1978:262).

In addition, the total variance (%) is 37.80 which means that the seven factors taken together account for 37.80 percent of the total variance in the set of variables; and the common variance (%) indicates the relative amount of the total variance of all retained factors that is contributed by each of the individual factor. The range of the common variance of the seven factors of this study is from 36.76 to 6.49 percent.

**Factor 1: The Climate of Supervisory Work**

Seven items loaded in the range of |.36| to |.66| on the first factor. There are two related themes in this first factor: (a) the assignment of responsibilities to supervisors and (b) the working conditions under which supervisors carry out these responsibilities. Items which loaded on this factor are presented in Table 4.2.

The items included in this factor are descriptive of a particular domain of administrative behavior: supervisors carry out their responsibilities in a particular organizational climate defined by the amount of discretion permitted, the amount of assistance provided, and the tightness of control exerted by senior administrators in the unit. The climate can range from closely supervised to autonomous. Means of most items shown in Table 4.1 are close to the mid-point (3.00), two items -- items 56 and 11 -- have higher means with negative factor loadings. The higher means suggest that discretion is granted to supervisors to handle their responsibilities by themselves. The tendency in the supervisory units is towards an autonomous climate of supervisory work, with lower factor scores being indicative of greater professionalism and less strictly monitored behavior.

**Factor 2: Procedural Specification**

The seven items which loaded on this factor describe the procedures which supervisors are expected to follow when performing their roles. Results are presented in Table 4.3.

The following are some of the areas in which standard procedures are followed in supervisory units: resolving difficult situations, handling academic matters such as curriculum implementation, demonstration and development of instructional materials, and dealing with clients.

**Table 4.2**

**Factor Loadings and Means of Items in Factor 1, The Climate of Supervisory Work**

| Organizational Characteristics | Factor Loadings | Mean |
|---|---|---|
| 57. There is confusion and overlap in the job responsibilities of the Assistant Director and Head Supervisor. | .66 | 2.74 |
| 45. Assignment of supervisory duties is made without regard for the supervisor's experience or training. | .55 | 2.54 |
| *56. Supervisors are allowed to do almost as they please in carrying out their tasks. | -.54 | 3.52 |
| 51. Supervisors cannot expect to get assistance from the head supervisor and/or the section head in developing standardized tests. | .54 | 2.36 |
| 46. Supervisors feel as though they are being watched to see that they obey all the rules. | .48 | 2.67 |
| 44. Supervisors who want to make their own decisions would quickly become discouraged in this organization. | .42 | 2.95 |
| 35. Red tape is a problem in getting a job done in this organization. | .41 | 3.14 |
| *11. Supervisors are left to their own judgement as to how to handle various problems. | -.36 | 3.35 |

* Score reversals when factor scores are calculated.

**Table 4.3**
**Factor Loadings and Means of Items in Factor 2, Procedural Specification**

| Organizational Characteristics | Factor Loadings | Mean |
|---|---|---|
| 33. Supervisors are expected to do classroom demonstrations of new teaching-learning kits for teachers. | .69 | 3.61 |
| 29. The development and demonstration of a wide variety of instructional methods and materials is encouraged in this supervisory unit. | .67 | 3.24 |
| 21. Supervisors are expected to follow standard procedures in handling problems related to curriculum implementation. | .57 | 3.90 |
| 5. Procedures are available for resolving difficult situations. | .54 | 3.37 |
| 23. Similar procedures are to be followed by supervisors in most situations related to curriculum implementation. | .52 | 3.93 |
| 4. Supervisors are expected to follow a manual of rules and regulations. | .49 | 3.85 |
| 6. Every person who calls the supervisory unit from the outside is treated the same. | .42 | 4.19 |

The degree of procedural specification can range from relatively unspecified to precisely specified. Higher factor scores indicate greater procedural specification. Since the mean of each item was relatively high (higher than the mid-point -- 3.00), the tendency is towards precise specification of the work procedures of supervisors in the supervisory units.

**Factor 3: Undefined**

The three items which loaded on factor 3 could not be interpreted. Results presented in Table 4.4 show that one item deals with channels of communication, one

item relates to an operational procedure, and the third item refers to a basis for promotion. These three items appeared to be unrelated and they could not be clearly interpreted. Therefore, it was decided not to use this factor in further analyses.

**Table 4.4**
**Factor Loadings and Means of Items in Factor 3**

| Organizational Characteristics | Factor Loadings | Mean |
|---|---|---|
| 41. Going through proper channels is stressed. | .53 | 3.40 |
| 42. Supervisors are encouraged to become friendly with principals, teachers, and other educational officers who work outside the supervisory unit. | .48 | 3.45 |
| 43. Supervisors are promoted for reasons other than demonstrating professional ability. | .44 | 2.40 |

**Factor 4: Control of Supervisors**

The four items which loaded on this factor describe the control of the performance of supervisors. Results are presented in Table 4.5. Rules and standard procedures do not seem to be heavily emphasized as means to guide supervisors' role performance.

The locus of responsibility for controlling supervisors can vary from organization-imposed to self-imposed. Higher factor scores indicate that the organization tends to regulate the behavior of supervisors; lower factor scores indicate self regulation. Inspection of the item means reported in Table 4.5 suggests that the tendency in the supervisory units is towards self regulation of conduct by the supervisors.

**Table 4.5**
**Factor Loadings and Means of Items in Factor 4, Control of Supervisors**

| Organizational Characteristics | Factor Loadings | Mean |
|---|---|---|
| 16. Supervisors are checked for rule violations. | .61 | 2.09 |
| 18. Standard procedures are used for dealing with complaints about the conduct of supervisors on the job. | .49 | 2.04 |
| 30. The administration sponsors get-togethers of supervisors. | .45 | 1.78 |
| *48. Supervisors are expected to be courteous, but reserved, at all times in dealings with teachers and principals. | -.38 | 3.94 |

* Score reversals when factor scores are calculated.

**Factor 5: Administrative Authority**

The four items which loaded on this factor related to the authority of administrators in the supervisory units, especially the head supervisors. Results are shown in Table 4.6. The exercise of administrative authority can range from informal to formal. Lower factor scores indicate a more informal exercise of authority and higher factor scores indicate a more exercise of formal authority.

Means of three items in this factor were less than 3.00, the mid-point, which suggests a tendency towards a more informal, rather than formal organization. The supervisors seem to work as a team with the head supervisor. Nevertheless, there are elements of formal authority. The respondents tend to perceive the head supervisor as giving them their "orders" and in this sense he/she is clearly first among equals.

**Table 4.6**
**Factor Loadings and Means of Items in Factor 5, Administrative Authority**

| Organizational Characteristics | Factor Loadings | Mean |
|---|---|---|
| 40. The head supervisor makes his/her own rules for managing the supervisory unit. | .60 | 2.37 |
| 32. Supervisors get their orders from the head supervisor. | .50 | 3.35 |
| 34. Nothing is said if supervisors get to the office late or leave early. | .48 | 2.54 |
| 36. The administrators in this organization stick pretty much to themselves. | .35 | 2.68 |

**Factor 6: Bases for Work Assignment and Promotion**

The seven items included in this factor refer to the bases for promotion and the way work is assigned to supervisors. The qualifications of supervisors are considered in assigning tasks to them. In addition, however, some criteria which are not related to technical knowledge such as "knowing somebody," "having an in with the administration," and "how well you are liked" may also be considered in work assignments and promotion. The relevant data are presented in Table 4.7.

The bases for work assignment and promotion can range from non-technical to professional/technical. Higher factor scores indicate a more non-technical basis for decision making; lower factor scores indicate a more professional/technical basis. Inspection of the means of the items in Table 4.7 leads to the conclusion that supervisory units are organizations in which professional/technical factors seem to be weighed along with non-technical factors in task assignment and promotion. Both sets of factors seem to be important.

**Table 4.7**
**Factor Loadings and Means of Items in Factor 6, Bases for Work Assignment and Promotion**

| Organizational Characteristics | Factor Loadings | Mean |
|---|---|---|
| 9. Specific tasks are assigned to particular supervisors. | .49 | 3.78 |
| 7. In order to get a promotion, a supervisor has to "know somebody." | .47 | 3.00 |
| 61. There isn't much chance for a promotion unless you are "in" with the administration. | .45 | 3.15 |
| 15. Supervisors are assigned to do work for which they have limited experience or training. | .44 | 2.76 |
| 27. Supervisors are responsible for more than one function. | .44 | 4.44 |
| 55. Promotions are based on how well you are liked. | .39 | 3.16 |
| 26. How things are done in the supervisory unit is left pretty much up to the individual supervisor. | .35 | 3.41 |

**Factor 7: Hierarchy of Authority**

The influence of senior administration over members of the organization is described by this factor. Administrative offices are arranged hierarchically. Decision makers are visible and supervisors' are accountable to them for their actions. Rules and procedures are frequently used to control supervisors. The thirteen items which make up this factor are presented in Table 4.8.

The relatively high means indicated in Table 4.8 show that senior administrators are very influential. In the supervisory units, the influence exerted by the senior administrative officers in the hierarchy is very strong.

**Table 4.8**

**Factor Loadings and Means of Items in Factor 7, Hierarchy of Authority**

| Organizational Characteristics | Factor Loadings | Mean |
|---|---|---|
| 60. Supervisors are treated according to the rules of the organization, no matter how serious a problem they have. | .60 | 3.35 |
| 54. No matter how special a supervisor's problem appears to be, he/she is treated the same way as anyone else. | .56 | 3.71 |
| 38. Any decision a supervisor makes has to have the superordinate's approval. | .54 | 4.19 |
| 59. There is only one way to do the job -- administration's way. | .51 | 3.42 |
| 20. There can be little action until an administrator approves a decision. | .49 | 3.87 |
| 47. Supervisors are to follow strict operational procedures at all time. | .49 | 3.36 |
| 58. Rules stating when supervisors arrive and depart from the building are strictly enforced. | .47 | 3.22 |
| 50. Even small matters have to be referred to the administrator for a final answer. | .46 | 2.65 |
| 10. Written orders from persons in higher positions are followed unquestioningly. | .46 | 4.10 |
| 62. A supervisor has to ask the administrator before he/she does almost anything. | .44 | 3.06 |
| * 1. Supervisors are their own bosses. | -.43 | 2.55 |
| 14. Each supervisor is responsible to an administrator to whom the supervisor reports regularly. | .41 | 4.32 |
| 8. No one can get necessary supplies without permission from an immediate superior. | .40 | 3.42 |

* Score reversals when factor scores are calculated.

## C. DISCUSSION OF THE RESULTS OF THE FACTOR ANALYSIS OF ORGANIZATIONAL CHARACTERISTICS

The discussion in this section focuses on (a) a comparison of bureaucratic characteristics defined in this study and those used in earlier studies, and (b) bureaucratic characteristics and Thai culture.

### Comparison of Organizational Characteristics

The 62 items in the organizational characteristics questionnaires of MacKay (1964) and Robinson (1966) were adapted for this study. These items had been developed to measure six dimensions of bureaucratic characteristics: (1) hierarchy of authority, (2) division of labor, (3) rules for incumbents, (4) procedural specification, (5) impersonality, and (6) technical competence. In the present study, factor analysis of the items indicates six factors (dimensions) as well but they are quite different. A comparison of bureaucratic characteristics used in the earlier studies and in this study is presented in Table 4.9.

Two dimensions are similar: procedural specification and hierarchy of authority. The remainder are different. Four new characteristics or dimensions have been identified in this study: climate of supervisory work, control of supervisors, bases for work assignment and promotion, and administrative authority.

The four new scales of this study deal with the autonomy of supervisors, the way administrators control supervisors, the way tasks are assigned, and how authority is distributed among organization members. Each of these new scales deals with an aspect of the relationships among organization members. The differences in scales between this study and MacKay and Robinson's study may be accounted for by the differences in cultures between Thailand and western countries such as Canada

**Table 4.9**

**A Comparison of Bureaucratic Characteristics**

| Bureaucratic Characteristics | Description | |
|---|---|---|
| | Earlier Studies | Current Study |
| 1. Hierarchy of Authority | organizations operate according to the principle of hierarchy, i.e. superiors control subordinates, decisions are made by incumbents of higher positions and communicated to subordinates | a similar dimension emerged from the factor analysis but there are slight differences; rules, standard procedures and interpersonal relationships also enter into the interpretation of this factor |
| 2. Division of Labor | specialized responsibilities are distributed among organizational members; each role is clearly specified | not used |
| 3. Rules for Incumbent | rules are stated in order to ensure uniformity and coordination of effort | not used |
| 4. Procedural Specification | standard procedures are developed to cover all circumstances | a very similar dimension emerged from factor analysis |
| 5. Impersonality | decisions are made based on facts and rationality; work relationships are impersonal | not used |
| 6. Technical Competence | employment and promotion are based on technical qualifications and universal standards | not used |

continued

**Table 4.9 (continued)**

| Bureaucratic Characteristics | Description | |
|---|---|---|
| | Earlier Studies | Current Study |
| 7. Climate of Supervisory Work | not used | the climate for supervisory work -- defined in terms of discretion permitted, assistance provided, and control exerted -- ranges from autonomous to loosely supervised; lower factor scores are indicative of greater autonomy |
| 8. Control of Supervisors | not used | organizations regulate behavior of supervisors by using rules and standard procedures; the locus for controlling supervisors' performance can range from organization-imposed to self-imposed |
| 9. Bases for Work Assignment and Promotion | not used | professional/technical and non-technical factors are involved in work assignment and promotion |
| 10. Administrative Authority | not used | relationships between administrators and subordinates are mediated by authority considerations which may range from informal to formal; lower factor scores are indicative of informal forms of authority |

## Bureaucratic Characteristics and Thai Culture

The results of the factor analysis reported above clearly indicate that the structure of bureaucratic characteristics in Thailand and western countries is different. This may be because of differences in the cultural and social characteristics.

### Significant Characteristics of Thailand

Thailand is the only Southeast Asian country never to have been colonized by Western powers. This undoubtedly accounts for its unique characteristics, continuously developed during more than 700 years of independence. Thailand is a predominantly Buddhist kingdom with a unique monarchy. Buddhism has gained wide acceptance amongst the Thai people and is integral to the Thai way of life. Religion is at the root of the sincere consideration for others that permeates every aspect of Thai life. Buddhism is the source of a concept encompassing spontaneous warmth and compassion that leads families to make sacrifices for friends and to extend hospitality to strangers. Personal friendships among Thais are predominantly based on kinship and proximity (National Identity Office, Office of the Prime Minister, 1984:64-65).

In Williams' view (1983), Thai people most admire individuals who lead virtuous lives according to the Buddhist ideals of gentleness, moderation, and generosity. The Buddhist teaching of "right speech" requires that only good things be said about people. A Thai virtue that may derive from this is called *jai yen* meaning "cool heart." One is expected to behave in a *jai yen* manner with a person of higher status and thus allow the person of superior status to "win the game." In addition, one tends to withhold expressions of disagreement and saying "no" is generally avoided, especially to an elder and superior.

These principles, implemented on a microcosmic scale by Thai people in the home and the village, can be extended to the nation at large (National Identity Office, Office of the Prime Minister, 1984:63-64). The factors of superior age, status or achievement

prevail over all, as a basis for respect. For example, respect is shown to teachers by their students, managers by their employees, and the Prime Minister by the bureaucracy.

Similarly, Williams (1983:18) reported that

> Thai society is essentially nonegalitarian and the hierarchy is accepted as natural. This hierarchy is first presented to Thais as children, when they are taught in a permissive and undisciplining family to respect all elder members of the family. This is why they are able to accept a subordinate position in the social hierarchy without resentment.

Williams (1983:18) further stated that

> Thai traditions stress the importance of politeness and respect to status superiors, and it is often said that no two people in the country have the same status; younger must respect elder; a student shouldn't question the teacher; children care for and obey parents all their lives; employee does not contradict employer or his superiors.

Thus, this shows that characteristics of Thailand are influenced by traditions.

Bureaucratic Characteristics

On the basis of the factor analysis, six factors were identified to measure bureaucratic characteristics of the supervisory units in Thailand. They are as follows: (1) the climate of supervisory work, (2) procedural specification, (3) control of supervisors, (4) administrative authority, (5) bases for work assignment and promotion, and (6) hierarchy of authority.

"Impersonality" is a dimension (factor) of bureaucratic characteristics reported in most previous studies. Ideally, impersonality assures equality of treatment and facilitates rationality. However, in Thailand it may be difficult to be impersonal because it is contrary to fundamental cultural teachings about human relationships. It may be difficult to find this characteristic in Thai organizations because personal relationships predominate in the work situation. Another reason is that social norms in Thailand require that only good things be said about people. If impersonality is applied in organizations it will run contrary to cultural expectations. Accordingly, it is not surprising that "impersonality" is not found to be a characteristic of Thai organizations.

In order to control personal relationships, rules and regulations are set. However, this study found that rules and regulations did not emerge as a factor to measure bureaucratic characteristics of a particular kind of the OPPEC Thai organization. Items related to "rules for incumbents" were distributed over all six factors. This is consistent with the observation that rules and regulations are common characteristics of Thai organizations; Thai administrators stress rules and regulations in managing organizations.

## D. RESULTS OF THE FACTOR ANALYSIS OF SATISFACTION WITH THE JOB SITUATION

Fourteen items were used to collect data on satisfaction with the job situation. Twelve of these items, which dealt with aspects of the job situation related to organizational characteristics, were factor analysed using principal components analysis with oblique rotation. The results of the two factor solution were the most readily interpreted. Results of the two factor solution are presented in Table 4.10. Only factor loadings greater than |.35| appear in the table. One item -- item 11 -- was discarded because it showed a double loading.

### Factor 1: Satisfaction with the Operating Structure

The operating structure factor is made up of items which describe various ways in which the work of the organization is done. These include the decision making process, operating procedures, and rules and regulations. Respondents are asked to express their degree of satisfaction with each of these various elements of the operating structure. Eight items (1, 2, 3, 4, 5, 6, 7, and 8) which loaded strongly on this factor and contributed logically to its meaning were included in this factor.

**Table 4.10**

**Factor Solution for 12 Items Pertaining to Satisfaction with the Job Situation Using Two Factors**

| Satisfaction with the Job Situation | Factors and Factor Loadings 1 | 2 |
|---|---|---|
| 5. The way senior administrators make decisions. | .89 | -.09 |
| 4. The operating procedures which senior administrators have established for dealing with problems in curriculum implementation. | .83 | -.18 |
| 6. The procedures to follow in dealing with recurring problems. | .81 | -.02 |
| 3. The rules and regulations you have to follow. | .73 | -.00 |
| 8. The procedures used by the administrators in instructing subordinates in performing their job. | .62 | .25 |
| 7. The methods used in determining promotion and salary increments. | .60 | .20 |
| 2. The treatment you receive when you have a problem. | .54 | .20 |
| 1. Your participation in the decision making process. | .46 | .26 |
| 10. The assignments for which you are responsible. | -.14 | .92 |
| 12. The way tasks are subdivided and assigned. | .18 | .71 |
| 9. Procedures the senior administrators use to assign responsibilities to supervisors. | .31 | .59 |
| 11. The procedures used by senior administrators in implementing rules and regulations. | .41 | .42 |
| Eigenvalue | 5.87 | 1.07 |
| Total Variance (%) | 48.90 | 8.90 |
| Common Variance (%) | 84.70 | 15.14 |
| Sum of Communalities | 6.93 | |
| Total Variance (%) Accounted For | 57.80 | |

### Factor 2: Satisfaction with Responsibilities

Items which load on this factor deal with satisfaction with work responsibilities and the procedures by which these responsibilities are assigned. Three items -- items 9, 10, and 12 -- which loaded strongly on this factor and contributed logically to the meaning of this factor were retained.

### Overall Job Satisfaction

Two items were developed to measure the overall job satisfaction experienced by respondents. These two items are as follows: item one -- "On the whole, how satisfied are you with the way in which your organization functions?" and item two -- "On the whole, how satisfied are you with your job?"

## E. SCALES FOR THE MEASUREMENT OF VARIABLES

In the previous analysis, the 46 items dealing with organizational characteristics and the 11 items on satisfaction with the job were factor analysed into seven and two factors, respectively. One organizational characteristics factor was deleted because no logical interpretation could be made.

For the measurement of organizational characteristics, a set of 43 items was chosen. Six scales were established: (1) the climate of supervisory work, (2) procedural specification, (3) control of supervisors, (4) administrative authority, (5) bases for work assignment and promotion, and (6) hierarchy of authority. Scores on the items in each scale obtained from individual respondents were added; a mean was calculated in order to provide a scale score. Hence, there were six scale scores pertaining to organizational characteristics for each respondent.

Eleven items used to measure respondents' satisfaction with the job situation yielded two scales which were: (1) satisfaction with the operating structure, and (2) satisfaction with responsibilities. Scores on the items in each scale obtained from

individual respondents were added, and averaged, in order to form a scale score to measure satisfaction with the job situation. Therefore, there were two scale scores pertaining to satisfaction with the job situation.

Two items were used to measure overall satisfaction. One item measured satisfaction with organization functions, another item measured satisfaction with the job. Each item was used as a separate measure. Thus, there were two scores pertaining to overall satisfaction.

In total, ten scores for each respondent -- six related to bureaucratic characteristics and four to satisfaction -- were used in further analyses.

## F. RELIABILITY AND INTERCORRELATIONS AMONG SCALES

### Organizational Characteristics

Reliability

Six scales consisting of 43 items were created to measure the bureaucratic characteristics of supervisory units at the provincial level in Thailand. These six scales included the climate of supervisory work (factor 1), procedural specification (factor 2), control of supervisors (factor 4), administrative authority (factor 5), bases for work assignment and promotion (factor 6), and hierarchy of authority (factor 7). The split-half technique was used to compute the reliability coefficients and the t-test was used to test the significance of the reliability coefficient.

To calculate the reliability by using the Split-half method, the 46 items were divided into two halves. Total scores for items in each half for each respondent were calculated; thus, two scores were obtained for each individual respondent. These two sets of scores were used to compute a reliability coefficient. A test of significance was then applied. To compute the reliability coefficient of each organizational characteristics scale, a similar procedure was applied.

The results are presented in Table 4.11. All reliability coefficients were statistically significant at the .001 level. The reliability coefficients indicate that the instrument has sufficient stability and accuracy in measuring organizational characteristics. In brief, the scales used to explore organizational characteristics are reliable.

Intercorrelations

The Pearson correlation coefficient was used to assess the relationships among the six scales and a total organizational characteristic score. To compute the total score, scores on all 46 items are summed. The results are presented in Table 4.12.

The results show that most scales are significantly intercorrelated. However, certain pairs of scores are not significantly correlated. These are scales 1 and 4, 2 and 5, 2 and 7, 4 and 5, 4 and 7, 5 and 6, and 5 and 7. In no case did the intercorrelation indicate that any more than 28 percent of the variance is common to the two different scales. This means that each scale has some features which are unique.

MacKay (1964:74-76) found that the intercorrelations among dimensions were statistically significant at the .05 level except the intercorrelation between "rules for incumbents" and "technical competence," and each of the six dimensions was positively and significantly correlated with the total score. He suggested that five dimensions measured bureaucratic features and one dimension -- technical competence -- measured a characteristic which is not bureaucratic.

Results shown in Table 4.12 indicate that each of the six scales was positively, and significantly, related to the total score which is consistent with the finding by MacKay (1964). The percentage of common variance indicated by these correlations ranges from 72.25 percent (scale 7 and total score) to 1.0 percent (scale 2 and total score). The relatively high correlation between each of scale 1 (the climate of supervisory

**Table 4.11**

**Reliability Coefficients of the Organizational Characteristics Scales**

| Scale | N | Number of Items | Reliability Coefficient | t-value |
|---|---|---|---|---|
| 1 | 376 | 8 | .78 | 24.11 |
| 2 | 377 | 7 | .78 | 24.14 |
| 4 | 377 | 4 | .40 | 8.45 |
| 5 | 376 | 4 | .46 | 10.02 |
| 6 | 377 | 7 | .62 | 15.30 |
| 7 | 375 | 13 | .81 | 26.68 |
| Total | 374 | 46 | .82 | 27.63 |

$\infty t_{.001} = 3.29$

**Table 4.12**

**Intercorrelations Among the Six Scales and Total Organizational Characteristics Score**

| Scale | 1 | 2 | 4 | 5 | 6 | 7 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 1.00 | | | | | | |
| 2 | -.40*** | 1.00 | | | | | |
| 4 | -.06 | .16*** | 1.00 | | | | |
| 5 | .11* | -.01 | .08 | 1.00 | | | |
| 6 | .54*** | -.31*** | -.18** | .05 | 1.00 | | |
| 7 | .53*** | -.05 | .002 | .05 | .48*** | 1.00 | |
| Total | .67*** | .10* | .18*** | .29*** | .60*** | .85*** | 1.00 |

* significant at .05 level

** significant at .01 level

*** significant at .001 level

work), scale 6 (bases for work assignment and promotion), and scale 7 (hierarchy of authority) and total score may suggest that these three dimensions are most characteristic of supervisory units in Thailand. One of these results supports a finding by MacKay (1964:77); that is, hierarchy of authority is one of the most pervasive characteristics of bureaucratic organization. Another result was unlike MacKay's findings. Although "procedural specification" was found by MacKay to be relatively highly correlated with the total score (r = .77), this correlation was low (r = .10). This suggests that members of supervisory units in Thailand and school staff members in Canada perceived "hierarchy of authority" as bureaucratic characteristics. However, members of supervisory units in Thailand did not perceive that "procedural specification" is as characteristic of bureaucratic organization as did school staffs in Canada. Said another way, the features of "procedural specification" needed to measure the organizational characteristics of supervisory units in Thailand may be different from features of "procedural specification" used to measure organizational characteristics in a western country such as Canada.

## Satisfaction with the Job Situation

### Reliability

Eleven items in total were used to measure satisfaction with the job situation. Eight of these items were used in a factor labelled satisfaction with the operating structure (factor 1); the other three items were used in a factor labelled satisfaction with responsibilities (factor 2). A split-half technique was used to compute the reliability coefficients and a t-test was used to test the significance.

To compute the reliability coefficient of the total score, items were divided into two halves and scored separately for each respondent. A similar procedure was applied to compute the reliability of each scale.

The results in Table 4.13 indicate that all reliability coefficients were statistically significant at the .001 level. The relatively high reliability coefficients indicate that the scales used to measure satisfaction with the job situation are highly reliable.

Intercorrelations

Two scales (satisfaction with the operating structure, satisfaction with responsibilities), consisting of a total of eleven items, were used to measure satisfaction with the job situation. The Pearson correlation coefficient was used to measure the relationships among the two scales and a total score. The results presented in Table 4.14 show that the correlation between the two scales was positive and significant beyond the .001 level.

The significant positive correlation between scales 1 and 2 indicates that these two scales are measuring closely related features of satisfaction with the job situation. The high correlation between factors indicates that if respondents were satisfied on scale 1, they would be satisfied on scale 2 as well. However, the percentage of variance accounted for is only about 43 percent. This may suggest that although the two factors from which the scales were derived are related, they also had some unique features. They measure a different aspect of satisfaction with the job situation as well as a similar aspect.

Overall Satisfaction

The value of the correlation coefficient of the two overall satisfaction items was .69 which was statistically significant at the .001 level. This relatively high correlation coefficient suggests that the items are measuring a common construct. Furthermore, these two overall job satisfaction items were significantly correlated with the two satisfaction factors at the .001 level. The results are reported in Table 4.15.

**Table 4.13**
**Reliability Coefficients of Two Scales Measuring Satisfaction with the Job Situation**

| Scale | N | Number of Items | Reliability Coefficient | t-value |
|---|---|---|---|---|
| 1 | 376 | 8 | .89 | 37.75 |
| 2 | 377 | 3 | .71 | 19.52 |
| Total | 376 | 11 | .90 | 39.93 |

$\infty t_{.001} = 3.29$

**Table 4.14**
**Correlation Between the Two Satisfaction Scales**

| Scale | 1 | 2 |
|---|---|---|
| 1 | 1.00 | |
| 2 | .66*** | 1.00 |
| Total | .97*** | .81*** |

*** significant at .001 level

**Table 4.15**
**Correlation Between the Two Satisfaction Factors and the Two Overall Satisfaction Items**

| Satisfaction with the Job Situation | Overall Satisfaction | |
|---|---|---|
| | Item One | Item Two |
| Factor 1 | .62*** | .54*** |
| Factor 2 | .60*** | .59*** |

*** significant at .001 level

The relatively high and significant correlation coefficients imply that the two factors measuring satisfaction with the job situation and the two items measuring overall satisfaction share some common characteristics. However, the highest percentage of common variance was only about 38 percent which means that the scales for satisfaction with the job situation and for overall satisfaction are dimensional in character and that they measure different constructs.

## G. SUMMARY

The factor analysis of the organizational characteristics items yielded seven factors but only six factors were used to define scales. One factor was rejected because it could not be interpreted. The six factors from which scales were derived are as follows: (1) the climate of supervisory work, (2) procedural specification, (3) control of supervisors, (4) administrative authority, (5) bases for work assignment and promotion, and (6) hierarchy of authority. The reliability coefficient for each factor was acceptable. A discussion of the six factors was presented in terms of previous research findings and the Thai culture.

The factor analysis of items designed to measure satisfaction with the job situation yielded two factors. They were (1) satisfaction with the operating structure and (2) satisfaction with responsibilities. The reliability of each factor was acceptable.

To measure the overall satisfaction with the job situation, two items were developed. They proved to be highly correlated. Furthermore, these two items were significantly correlated with the two factors pertaining to satisfaction with the job situation.

# CHAPTER 5
# ORGANIZATIONAL CHARACTERISTICS IN THE SUPERVISORY UNITS

This chapter describes and analyzes the organizational characteristics of the supervisory units which operate under OPPECs in Thailand. The results are presented in three sections in such a way as to address the research problem which focus on the extent to which bureaucratic dimensions are evident in the operation of supervisory units.

The organizational characteristics of all OPPEC supervisory units are described in the first section. An examination of differences in organizational characteristics across different OPPEC sizes and across positions of respondents in OPPEC supervisory units are presented in the second and third sections.

## A. ORGANIZATIONAL CHARACTERISTICS OF OPPECs

Samples consisted of three groups of respondents in OPPECs: senior administrators, section heads, and supervisors. They were asked to respond to items designed to reveal the characteristics of their organizations. The respondent rated each item on a five-point scale of "never," "seldom," "occasionally," "often," and "always" and responses were assigned a score of 1 to 5, respectively. The factor analysis yielded seven factors consisting of forty-six items. Six of these factors were used to interpret the organizational characteristics of supervisory units.

This section focuses on the overview of bureaucratic characteristics of supervisory units. The scale scores are presented in Table 5.1. On the assumption that the scale measures the possible variation in each of the dimension, judgements are made about degree of bureaucratization on the basis of mean score on each dimension.

**Table 5.1**
**Scale Scores on Organizational Characteristics**

| Scale | Scale Scores | S.D. | N |
|---|---|---|---|
| The Climate of Supervisory Work | 2.70 | 0.68 | 377 |
| Procedural Specification | 3.72 | 0.63 | 377 |
| Control of Supervisors | 1.99 | 0.64 | 377 |
| Administrative Authority | 2.74 | 0.68 | 377 |
| Bases for Work Assignment and Promotion | 3.39 | 0.61 | 377 |
| Hierarchy of Authority | 3.55 | 0.63 | 377 |

A higher mean value indicates a higher degree of bureaucracy, except "bases for work assignment and promotion."

Since each scale score ranges from 1 to 5, a score of 3 is the mid-point of the range. This study used this mid-point as the criterion to determine the degree of bureaucracy in the supervisory units. A score of 5 indicates a high degree of bureaucracy and a score of 1 indicates a low degree of bureaucracy for all bureaucratic characteristics except "bases for work assignment and promotion." In the latter case, the direction of the scoring is reversed. If the scale score of a characteristic (except "bases for work assignment and promotion") is below 3.00, the tendency is towards a lower degree of bureaucracy; if the bureaucratic scale score of a characteristic (except "bases for work assignment and promotion") is above 3.00, the tendency is towards a higher degree of bureaucracy.

Table 5.1 indicates that "the climate of supervisory work" tends to be autonomous which suggests that supervisors are treated as professionals, e.g. they are to some degree encouraged to exercise their own judgement in handling problems which come up in the work of the supervisory units. On the other hand, the high scale score of "procedural specification" suggests that supervisory units use standard procedures to carry out their

work. That is, the supervisory units have established standard operating procedures to carry out the responsibilities which have been assigned to them.

The scale score of "control of supervisors" is quite low (1.99) which suggests again that supervisory units are influenced by a professional orientation. A self-imposed standard of control is applied by supervisors. They are expected to control themselves rather than be subordinated to the organization. The relatively low scale score on the "administrative authority" scale also suggests that the numbers of supervisory units form a colleague-oriented reference group; however, elements of bureaucratic authority still exist.

Supervisory units tends to use personalistic factors as the "bases for work assignment and promotion," as well as professional/technical factors. The supervisory units tend to use personal characteristics, in addition to technical expertise as criteria for assigning work to supervisors or for promoting them.

The high scale score of "hierarchy of authority" suggests that the supervisory units are arranged hierarchically and that authority is centralized. For example, supervisors must gain their superordinate's approval on important matters for decisions.

In brief, the supervisory units tend to have a professional orientation, but elements of bureaucratic characteristics are also present. The climate in the units is autonomous; the behavior of supervisors is not controlled tightly by the organization -- they are expected to exercise judgement and to be self directed. On the other hand, the units place emphasis on "procedural specification," and the "hierarchy of authority" is evident. Work assignment and promotion tends to be strongly influenced by personalistic factors which can outweigh professional/technical factors.

## B. PERCEPTIONS OF ORGANIZATIONAL CHARACTERISTICS ACROSS SIZES OF OPPECs

The six scales, in conjunction with a One-way Analysis of Variance and Scheffé test, were used to identify differences in organizational characteristics across sizes of OPPECs.

### Variation in Respondents' Perceptions of Bureaucratic Characteristics

Four categories of OPPECs were identified. They were small, medium, large and Bangkok. The number of supervisors and the number of primary schools under each OPPEC were taken into account in classifying the size of supervisory unit. Small size OPPECs had 7 - 10 supervisors and fewer than 250 schools, medium size OPPECs had 11 - 14 supervisors and 250 - 500 schools, and large size OPPECs had 15 - 18 supervisors and above 500 schools. Bangkok was included in the sample because of the following unique characteristics: it is the capital city, it has the smallest number of schools (36 schools) which most of them are large schools, and it has a large number of supervisors (11 supervisors).

The following research question is addressed in the analysis presented in this section:

> What differences in bureaucratic characteristics exist among the different sizes of supervisory units as perceived by all respondents?

The purpose of the analysis was to compare the bureaucratic characteristics among four categories of the supervisory units. Six scales were analysed based on data received from three levels of members in OPPECs, namely, senior administrators, section heads, and supervisors. Results are presented in Table 5.2.

As Table 5.2 indicates, there were statistically significant differences across supervisory units on four of the six factors: the climate of supervisory work ($p < .05$), procedural specification ($p < .05$), bases for work assignment and promotion ($p < .05$),

**Table 5.2**

**Results of One-Way Analysis of Variance of Organizational Characteristics Across Sizes of OPPECs**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| The Climate of Supervisory Work | 1.Small | 103 | 2.65 | 0.75 | 2.70* | 3-2, 3-1 |
| | 2.Medium | 176 | 2.64 | 0.67 | | |
| | 3.Large | 86 | 2.88 | 0.61 | | |
| | 4.Bangkok | 12 | 2.71 | 0.39 | | |
| Procedural Specification | 1.Small | 103 | 3.66 | 0.69 | 2.91* | none |
| | 2.Medium | 176 | 3.82 | 0.61 | | |
| | 3.Large | 86 | 3.63 | 0.61 | | |
| | 4.Bangkok | 12 | 3.52 | 0.50 | | |
| Control of Supervisors | 1.Small | 103 | 1.91 | 0.67 | 2.18 | none |
| | 2.Medium | 176 | 1.99 | 0.63 | | |
| | 3.Large | 86 | 2.10 | 0.67 | | |
| | 4.Bangkok | 12 | 1.65 | 0.38 | | |
| Administrative Authority | 1.Small | 103 | 2.76 | 0.60 | 0.88 | none |
| | 2.Medium | 176 | 2.73 | 0.69 | | |
| | 3.Large | 86 | 2.76 | 0.73 | | |
| | 4.Bangkok | 12 | 2.44 | 0.75 | | |
| Bases for Work Assignment and Promotion | 1.Small | 103 | 3.25 | 0.64 | 3.09* | 3-1, 2-1 |
| | 2.Medium | 176 | 3.44 | 0.60 | | |
| | 3.Large | 86 | 3.49 | 0.56 | | |
| | 4.Bangkok | 12 | 3.30 | 0.55 | | |
| Hierarchy of Authority | 1.Small | 103 | 3.53 | 0.62 | 4.14** | 3-4 |
| | 2.Medium | 176 | 3.53 | 0.63 | | |
| | 3.Large | 86 | 3.71 | 0.61 | | |
| | 4.Bangkok | 12 | 3.09 | 0.43 | | |

* significant at .05 level
** significant at .01 level
A higher mean value indicates higher bureaucracy, except "bases for work assignment and promotion."

and hierarchy of authority ($p < .01$). The bureaucratic characteristics which members of each size of OPPEC perceived to be similar were "control of supervisors" and "administrative authority."

The members of large size OPPECs rated their organizations as having a less autonomous climate than did members of small and medium size OPPECs. The mean score for large size OPPECs was significantly different from that of small and medium size OPPECs. Furthermore, the members of large size OPPECs perceived that hierarchy of authority was more centralized than did members in Bangkok. The mean score in large size OPPECs was significantly different from that in Bangkok.

Although the average scale scores for "procedural specification" were significantly different for supervisory units of different sizes, the Scheffé test indicated that no group was significantly different from any one other. However, if Bangkok with 12 respondents was excluded, members in medium size OPPECs perceived higher procedural specification than members in large size OPPECs ($F = 3.63$). The mean score of medium size OPPECs was significantly different from large size OPPECs.

The members of small size OPPECs perceived that their organizations used non-technical factors as bases for work assignment and promotion less often than did members of medium and large size OPPECs. The mean score of small size OPPECs was significantly different from medium and large size OPPECs.

In summary, there were differences in perception of bureaucratic characteristics among small, medium, and large size OPPECs. However, these differences were neither large nor consistent.

**Variation in Respondents' Perceptions of Bureaucratic Characteristics by Position**

Three groups of respondents working in the OPPEC supervisory units were defined for analyzing the perceptions of bureaucratic characteristics across sizes of the units. They are senior administrator, section head, and supervisor samples.

Senior Administrator Sample

There were seventy-eight senior administrators in the sample. Since only two of the senior administrators were in Bangkok, the sample was too small to compare the number of senior administrators in Bangkok with those in other sizes of OPPECs. Hence, data obtained from senior administrators in Bangkok were not included in the analysis of bureaucratic characteristics based on perceptions of senior administrators. Analysis of the data was guided by the following research question:

> What differences in bureaucratic characteristics exist among the different sizes of supervisory units as perceived by senior administrators?

Results presented in Table 5.3 show that the senior administrators in small, medium, and large size OPPECs had similar perceptions of bureaucratic characteristics. That is, there were no significant differences in administrators' perceptions of bureaucratic characteristics across supervisory units of different size.

In general, the senior administrators perceive a relatively high degree of procedural specification in the operation of the OPPECs, and a tendency towards autonomy in the climate of supervisory work and self-regulation of behavior by supervisors. The senior administrators perceive only modest tendencies towards hierarchy of authority in the operation of the OPPECs.

**Table 5.3**
**Results of One-Way Analysis of Variance of Organizational Characteristics Across Sizes of OPPECs in the Senior Administrator Sample**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| The Climate of Supervisory Work | 1.Small | 23 | 2.34 | 0.62 | 0.16 | none |
| | 2.Medium | 38 | 2.29 | 0.50 | | |
| | 3.Large | 15 | 2.38 | 0.56 | | |
| Procedural Specification | 1.Small | 23 | 3.88 | 0.60 | 0.54 | none |
| | 2.Medium | 38 | 4.00 | 0.53 | | |
| | 3.Large | 15 | 4.04 | 0.43 | | |
| Control of Supervisors | 1.Small | 23 | 1.98 | 0.48 | 2.95 | none |
| | 2.Medium | 38 | 2.34 | 0.69 | | |
| | 3.Large | 15 | 2.43 | 0.75 | | |
| Administrative Authority | 1.Small | 23 | 2.51 | 0.58 | 1.80 | none |
| | 2.Medium | 38 | 2.80 | 0.64 | | |
| | 3.Large | 15 | 2.82 | 0.61 | | |
| Bases for Work Assignment and Promotion | 1.Small | 23 | 2.92 | 0.64 | 0.24 | none |
| | 2.Medium | 38 | 3.02 | 0.59 | | |
| | 3.Large | 15 | 2.92 | 0.52 | | |
| Hierarchy of Authority | 1.Small | 23 | 3.32 | 0.53 | 1.97 | none |
| | 2.Medium | 38 | 3.13 | 0.57 | | |
| | 3.Large | 15 | 3.43 | 0.48 | | |

A higher mean value indicates higher bureaucracy, except "bases for work assignment and promotion."

Section Head Sample

Since the differences in number of section heads in Bangkok (N = 2) and the other categories of OPPECs would affect the One-Way Analysis of Variance comparison, Bangkok was again excluded from the comparison. The analysis of data was guided by the following research question:

> What differences in bureaucratic characteristics exist among the different sizes of supervisory units as perceived by section heads?

Results presented in Table 5.4 indicate that section heads in small, medium, and large size OPPECs had similar perceptions of bureaucratic characteristics. This suggests that the size of the organization is not related to the perceptions of bureaucratic characteristics, as reported by section heads.

In general, the section heads perceive a relatively high degree of both procedural specification and hierarchy of authority in the operation of the OPPECs, and a tendency towards autonomy in the climate of supervisory work and self-regulation of behavior by supervisors.

Supervisor Sample

Since Bangkok had only eight supervisors which was too small for comparison with the number of supervisors in the other categories of OPPECs, Bangkok was excluded from the comparison. The analysis of data was guided by the following research question:

> What differences in bureaucratic characteristics exist among the different sizes of supervisory units as perceived by supervisors?

The relevant data presented in Table 5.5 indicate that the data received from supervisors in small, medium, and large size OPPECs yielded statistical differences ($p < .05$) on two factors -- procedural specification, and bases for work assignment and promotion. No significant differences were noted for the other four factors, namely, the

**Table 5.4**
**Results of One-Way Analysis of Variance of Organizational Characteristics Across Sizes of OPPECs in the Section Head Sample**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| The Climate of Supervisory Work | 1.Small | 10 | 2.56 | 0.67 | 1.30 | none |
| | 2.Medium | 20 | 2.72 | 0.69 | | |
| | 3.Large | 6 | 3.10 | 0.48 | | |
| Procedural Specification | 1.Small | 10 | 3.73 | 0.44 | 0.11 | none |
| | 2.Medium | 20 | 3.67 | 0.76 | | |
| | 3.Large | 6 | 3.57 | 0.60 | | |
| Control of Supervisors | 1.Small | 10 | 2.13 | 0.88 | 1.53 | none |
| | 2.Medium | 20 | 1.85 | 0.59 | | |
| | 3.Large | 6 | 2.38 | 0.65 | | |
| Administrative Authority | 1.Small | 10 | 2.95 | 0.64 | 0.93 | none |
| | 2.Medium | 20 | 2.71 | 0.66 | | |
| | 3.Large | 6 | 3.13 | 0.97 | | |
| Bases for Work Assignment and Promotion | 1.Small | 10 | 3.24 | 0.38 | 1.75 | none |
| | 2.Medium | 20 | 3.60 | 0.58 | | |
| | 3.Large | 6 | 3.62 | 0.50 | | |
| Hierarchy of Authority | 1.Small | 10 | 3.46 | 0.59 | 1.38 | none |
| | 2.Medium | 20 | 3.83 | 0.60 | | |
| | 3.Large | 6 | 3.64 | 0.50 | | |

A higher mean value indicates higher bureaucracy, except "bases for work assignment and promotion."

**Table 5.5**
**Results of One-Way Analysis of Variance of Organizational Characteristics Across Sizes of OPPECs in the Supervisor Sample**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| The Climate of Supervisory Work | 1.Small | 70 | 2.76 | 0.77 | 2.69 | none |
| | 2.Medium | 118 | 2.74 | 0.68 | | |
| | 3.Large | 65 | 2.98 | 0.58 | | |
| Procedural Specification | 1.Small | 70 | 3.58 | 0.73 | 4.15* | 2-3, 2-1 |
| | 2.Medium | 118 | 3.79 | 0.60 | | |
| | 3.Large | 65 | 3.54 | 0.62 | | |
| Control of Supervisors | 1.Small | 70 | 1.91 | 0.69 | 0.60 | none |
| | 2.Medium | 118 | 1.90 | 0.57 | | |
| | 3.Large | 65 | 2.00 | 0.63 | | |
| Administrative Authority | 1.Small | 70 | 2.82 | 0.58 | 0.58 | none |
| | 2.Medium | 118 | 2.72 | 0.71 | | |
| | 3.Large | 65 | 2.72 | 0.73 | | |
| Bases for Work Assignment and Promotion | 1.Small | 70 | 3.36 | 0.64 | 3.69* | 3-1, 2-1 |
| | 2.Medium | 118 | 3.55 | 0.55 | | |
| | 3.Large | 65 | 3.60 | 0.50 | | |
| Hierarchy of Authority | 1.Small | 70 | 3.60 | 0.64 | 1.83 | none |
| | 2.Medium | 118 | 3.60 | 0.61 | | |
| | 3.Large | 65 | 3.78 | 0.64 | | |

* significant at .05 level

A higher mean value indicates higher bureaucracy, except "bases for work assignment and promotion."

climate of supervisory work, control of supervisors, administrative authority, and hierarchy of authority.

These results indicate that supervisors in medium size OPPECs perceived that procedural specification was more intensive than did supervisors in small and large size OPPECs. The mean score of medium size OPPECs was significantly different from the mean scores of small and large size OPPECs. For "bases for work assignment and promotion," supervisors in small size OPPECs perceived that personalistic factors were used less had less weight (as compared to professional/technical considerations) than did supervisors in medium and large size OPPECs. The mean score of this characteristic of small size OPPECs was significantly different from mean scores of medium and large size OPPECs. Nevertheless, procedural specification and the influence of personalistic factors is relatively strong in all OPPECs, regardless of size.

Generally, each group, namely, senior administrators, section heads, and supervisors in each size of OPPECs (small, medium, and large size) rated bureaucratic characteristics similarly. Only the results obtained from supervisors yielded statistically significant differences in two bureaucratic characteristics -- procedural specification, and bases for work assignment and promotion. This suggests that the size may associate with the operation of OPPECs from the vantage point of the supervisors, but that this is not the case for section heads and senior administrators.

## C. PERCEPTIONS OF ORGANIZATIONAL CHARACTERISTICS ACROSS POSITIONS

To examine the differences in perceptions of organizational characteristics across positions, the six scales were again employed. One-Way Analysis of Variance was used to assess the significance of differences among positions in OPPECs. The Scheffé test was applied to identify the groups (classified by positions in OPPECs) which were

significantly different. The groups that were not significantly different were assumed to perceive bureaucratic characteristics similarly.

Positions in OPPECs were classified into three levels: (1) senior administrators which consists of directors, assistant directors, and head supervisors, (2) section heads, and (3) supervisors.

Bangkok had twelve respondents of which two were senior administrators, two were section heads, and eight were supervisors. Members of each category were too few to test the significance among means. Thus, the differences in bureaucratic characteristics across positions in Bangkok were not examined.

**Variation in Respondents' Perceptions of Bureaucratic Characteristics**

The comparison of bureaucratic characteristics among three levels of position in OPPECs -- senior administrators, section heads, and supervisors -- presented in this part was guided by the following research question:

> What differences exist in bureaucratic characteristics of the supervisory units as perceived by respondents at the various positions in OPPECs?

Results of analysis of the data are reported in Table 5.6. It was found that respondents at each level perceived five of the six bureaucratic characteristics differently; differences were significant at the .001 level. Only one characteristic -- administrative authority -- did not yield significant differences.

As compared with section heads and supervisors, senior administrators perceived the supervisory units as having a more autonomous climate. The senior administrators when compared with section heads and supervisors also perceived a greater degree of procedural specification and less centralized authority. Furthermore, section heads and supervisors perceived low application of professional/technical factors in personnel decisions than did senior administrators. The mean scale scores of data from senior administrators on "the climate of supervisory work," "procedural specification," "bases for work assignment and promotion," and "hierarchy of authority" were significantly

**Table 5.6**
**Results of One-Way Analysis of Variance of Organizational Characteristics Across Positions in OPPECs**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| The Climate of Supervisory Work | 1.Senior Admin. | 78 | 2.33 | 0.54 | 16.66*** | 3-1, 2-1 |
| | 2.Section Head | 38 | 2.72 | 0.65 | | |
| | 3.Supervisor | 261 | 2.81 | 0.68 | | |
| Procedural Specification | 1.Senior Admin. | 78 | 3.95 | 0.54 | 6.73*** | 1-2, 1-3 |
| | 2.Section Head | 38 | 3.68 | 0.63 | | |
| | 3.Supervisor | 261 | 3.66 | 0.65 | | |
| Control of Supervisors | 1.Senior Admin. | 78 | 2.23 | 0.66 | 7.40*** | 1-3 |
| | 2.Section Head | 38 | 2.01 | 0.68 | | |
| | 3.Supervisor | 261 | 1.92 | 0.62 | | |
| Administrative Authority | 1.Senior Admin. | 78 | 2.71 | 0.61 | 0.36 | none |
| | 2.Section Head | 38 | 2.82 | 0.70 | | |
| | 3.Supervisor | 261 | 2.73 | 0.69 | | |
| Bases for Work Assignment and Promotion | 1.Senior Admin. | 78 | 2.97 | 0.59 | 27.41*** | 3-1, 2-1 |
| | 2.Section Head | 38 | 3.46 | 0.55 | | |
| | 3.Supervisor | 261 | 3.51 | 0.57 | | |
| Hierarchy of Authority | 1.Senior Admin. | 78 | 3.23 | 0.55 | 13.90*** | 2-1, 3-1 |
| | 2.Section Head | 38 | 3.66 | 0.60 | | |
| | 3.Supervisor | 261 | 3.63 | 0.63 | | |

*** significant at .001 level

A higher mean value indicates higher bureaucracy, except "bases for work assignment and promotion."

different from the mean scores of section heads and supervisors. On the "control of supervisors" factor, senior administrators, as compared with supervisors, perceived that self-imposed standards of control were less evident in the supervisory units. The mean score of senior administrators and supervisors on this characteristic was significantly different.

Senior administrators perceived most of the bureaucratic characteristics differently from section heads and supervisors, especially from supervisors. Section heads and supervisors had similar perceptions of all characteristics. One characteristic that senior administrators, section heads, and supervisors rated similarly was "administrative authority." These findings suggest that levels of position in OPPECs are related to perceptions of respondents regarding bureaucratic characteristics.

## Variation in Respondents' Perceptions of Bureaucratic Characteristics by OPPEC Size

Three sizes of OPPEC supervisory units were defined for analyzing the perceptions of bureaucratic characteristics across positions of respondents working in the units. They were small, medium, and large size.

### Small Size OPPECs

The findings of this analysis address the following research question:

> What differences exist in bureaucratic characteristics of the supervisory units as perceived by respondents at the various positions in small size OPPECs?

Respondents from small size OPPECs consisted of twenty-three senior administrators, ten section heads, and seventy supervisors. Results of the comparison among positions in small size OPPECs are presented in Table 5.7. On only one bureaucratic characteristic, "bases for work assignment and promotion," was the difference significant at the .05 level. Senior administrators, as compared to supervisors,

**Table 5.7**
**Results of One-Way Analysis of Variance of Organizational Characteristics of Small Size OPPECs Across Position of Respondents**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| The Climate of Supervisory Work | 1.Senior Admin. | 23 | 2.34 | 0.62 | 2.96 | none |
| | 2.Section Head | 10 | 2.56 | 0.67 | | |
| | 3.Supervisor | 70 | 2.76 | 0.77 | | |
| Procedural Specification | 1.Senior Admin. | 23 | 3.88 | 0.60 | 1.73 | none |
| | 2.Section Head | 10 | 3.73 | 0.44 | | |
| | 3.Supervisor | 70 | 3.58 | 0.73 | | |
| Control of Supervisors | 1.Senior Admin. | 23 | 1.98 | 0.48 | 0.48 | none |
| | 2.Section Head | 10 | 2.13 | 0.88 | | |
| | 3.Supervisor | 70 | 1.91 | 0.69 | | |
| Administrative Authority | 1.Senior Admin. | 23 | 2.51 | 0.58 | 2.97 | none |
| | 2.Section Head | 10 | 2.95 | 0.64 | | |
| | 3.Supervisor | 70 | 2.82 | 0.58 | | |
| Bases for Work Assignment and Promotion | 1.Senior Admin. | 23 | 2.92 | 0.64 | 4.36* | 3-1 |
| | 2.Section Head | 10 | 3.24 | 0.38 | | |
| | 3.Supervisor | 70 | 3.36 | 0.64 | | |
| Hierarchy of Authority | 1.Senior Admin. | 23 | 3.32 | 0.53 | 1.93 | none |
| | 2.Section Head | 10 | 3.46 | 0.59 | | |
| | 3.Supervisor | 70 | 3.60 | 0.64 | | |

* significant at .05 level.

A higher mean value indicates higher bureaucracy, except "bases for work assignment and promotion."

perceived that professional/technical factors were emphasized more in personnel decisions. The mean score of senior administrators was significantly different from that of supervisors.

Medium Size OPPECs

There were thirty-eight senior administrators, twenty section heads, and one hundred and eighteen supervisors in medium size OPPECs. The analysis of data was guided by the following research question:

> What differences exist in bureaucratic characteristics of the supervisory units as perceived by respondents at the various positions in medium size OPPECs?

Results of the comparison among positions in medium size OPPECs are reported in Table 5.8. The average scale scores of senior administrators, section heads, and supervisors were significantly different, at the .001 level, on four factors: "the climate of supervisory work," "control of supervisors," "bases for work assignment and promotion," and "hierarchy of authority." No significant differences were noted for the "procedural specification" and "administrative authority" scales.

In medium size OPPECs, senior administrators as compared to section heads and supervisors, perceived that supervisory units have a more autonomous climate and that a self-imposed standard of control was less evident in the supervisory units. Furthermore, senior administrators as compared to section heads and supervisors perceived that a lower degree of emphasis in the supervisory units on personalistic factors and on the centralization of authority. The mean score on each characteristic for senior administrators was significantly different from the average scores of section heads and supervisors.

**Table 5.8**
**Results of One-Way Analysis of Variance of Organizational Characteristics of Medium Size OPPECs Across Position of Respondents**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| The Climate of Supervisory Work | 1.Senior Admin. | 38 | 2.29 | 0.50 | 7.17*** | 3-1, 2-1 |
| | 2.Section Head | 20 | 2.72 | 0.69 | | |
| | 3.Supervisor | 118 | 2.74 | 0.68 | | |
| Procedural Specification | 1.Senior Admin. | 38 | 4.00 | 0.53 | 2.43 | none |
| | 2.Section Head | 20 | 3.67 | 0.76 | | |
| | 3.Supervisor | 118 | 3.79 | 0.60 | | |
| Control of Supervisors | 1.Senior Admin. | 38 | 2.34 | 0.69 | 8.16*** | 1-2, 1-3 |
| | 2.Section Head | 20 | 1.85 | 0.59 | | |
| | 3.Supervisor | 118 | 1.90 | 0.57 | | |
| Administrative Authority | 1.Senior Admin. | 38 | 2.80 | 0.64 | 0.20 | none |
| | 2.Section Head | 20 | 2.71 | 0.66 | | |
| | 3.Supervisor | 118 | 2.72 | 0.71 | | |
| Bases for Work Assignment and Promotion | 1.Senior Admin. | 38 | 3.02 | 0.59 | 14.01*** | 2-1, 3-1 |
| | 2.Section Head | 20 | 3.60 | 0.58 | | |
| | 3.Supervisor | 118 | 3.55 | 0.55 | | |
| Hierarchy of Authority | 1.Senior Admin. | 38 | 3.13 | 0.57 | 11.91*** | 2-1, 3-1 |
| | 2.Section Head | 20 | 3.83 | 0.60 | | |
| | 3.Supervisor | 118 | 3.60 | 0.61 | | |

*** significant at .001 level

A higher mean value indicates higher bureaucracy, except "bases for work assignment and promotion."

Large Size OPPECs

The large-size OPPECs category was comprised of fifteen senior administrators, six section heads, and sixty-five supervisors. The analysis of data was guided by the following research question:

> What differences exist in bureaucratic characteristics of the supervisory units as perceived by respondents at the various positions in large size OPPECs?

Results presented in Table 5.9 indicate that perceptions of senior administrators were significantly different from the perceptions of section heads and supervisors on the following factors: "the climate of supervisory work" ($p < .01$), "procedural specification" ($p < .05$), "control of supervisors" ($p < .05$), and "bases for work assignment and promotion" ($p < .001$). Their perceptions were similar with respect to "administrative authority" and "hierarchy of authority."

Senior administrators in large size OPPECs, as compared with section heads and supervisors, perceived that supervisory units had a more autonomous climate and emphasized professional/technical factors more strongly in personnel decisions. In addition, senior administrators as compared with supervisors, perceived a higher degree of procedural specification and a lower degree of self-imposed control on the part of supervisors.

In summary, the results of the comparison of bureaucratic characteristics across positions when all OPPECs were considered and in the different sizes of OPPECs were similar. The differences were between senior administrators on the one hand and section heads and supervisors on the other. The only characteristic in which there was no difference across positions was "administrative authority."

Respondents from each position in small size OPPECs displayed similar perceptions of bureaucratic characteristics except "bases for work assignment and promotion." The perceptions of bureaucratic characteristics reported by respondents in

**Table 5.9**

**Results of One-Way Analysis of Variance of Organizational Characteristics of Large Size OPPECs Across Position of Respondents**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| The Climate of Supervisory Work | 1.Senior Admin. | 15 | 2.38 | 0.56 | 7.16** | 2-1,3-1 |
| | 2.Section Head | 6 | 3.10 | 0.48 | | |
| | 3.Supervisor | 65 | 2.98 | 0.58 | | |
| Procedural Specification | 1.Senior Admin. | 15 | 4.04 | 0.43 | 4.40* | 1-3 |
| | 2.Section Head | 6 | 3.57 | 0.60 | | |
| | 3.Supervisor | 65 | 3.54 | 0.62 | | |
| Control of Supervisors | 1.Senior Admin. | 15 | 2.43 | 0.75 | 3.26* | 1-3 |
| | 2.Section Head | 6 | 2.38 | 0.65 | | |
| | 3.Supervisor | 65 | 2.00 | 0.63 | | |
| Administrative Authority | 1.Senior Admin. | 15 | 2.82 | 0.61 | 0.91 | none |
| | 2.Section Head | 6 | 3.13 | 0.97 | | |
| | 3.Supervisor | 65 | 2.72 | 0.73 | | |
| Bases for Work Assignment and Promotion | 1.Senior Admin. | 15 | 2.92 | 0.52 | 11.19*** | 2-1, 3-1 |
| | 2.Section Head | 6 | 3.62 | 0.50 | | |
| | 3.Supervisor | 65 | 3.60 | 0.50 | | |
| Hierarchy of Authority | 1.Senior Admin. | 15 | 3.43 | 0.48 | 2.03 | none |
| | 2.Section Head | 6 | 3.64 | 0.50 | | |
| | 3.Supervisor | 65 | 3.78 | 0.64 | | |

* significant at .05 level

** significant at .01 level

*** significant at .001 level

A higher mean value indicates higher bureaucracy, except "bases for work assignment and promotion."

each position in medium and in large size OPPECs were different. In medium size OPPECs, the perceptions were significantly different when the average scores on four factors for senior administrators, on the one hand, and section heads and supervisors, on the other, were compared. However, in large size OPPECs the perceptions of senior administrators yielded significant differences from the perceptions of section heads and supervisors on two characteristics. The perceptions of senior administrators were significantly different from those of supervisors on another two characteristics. This may suggest that the highest level respondents (senior administrators) perceived organizational characteristics differently from the lower level respondents (section heads) and especially the lowest level respondents (supervisors).

## D. SUMMARY

The results of the data analyses presented in this chapter focused on the organizational characteristics of supervisory units and differences in these characteristics across sizes of supervisory units and across positions in OPPECs. Results indicated that "the climate of supervisory work" tended to be autonomous, "procedural specification" was emphasized, "control of supervisors" was towards self-imposed control, "administrative authority" tended to be informal, "bases for work assignment and promotion" seemed to be influenced by personalistic factors, and "hierarchy of authority" was centralized.

The results of analysis of variance of bureaucratic characteristics across sizes of the supervisory units and across positions in OPPECs indicate that there were differences on some bureaucratic characteristics, depending on size of supervisory units and the position of the respondents. Only "administrative authority" was perceived similarly across different sizes and positions in OPPECs.

A comparison in terms of positions in OPPECs indicated that senior administrators perceived bureaucratic characteristics differently from section heads and supervisors, but that section heads and supervisors had similar perceptions. Senior administrators as compared with section heads and supervisors perceived that supervisory units operated in a more autonomous climate, had a high procedural specification, used a more professional/technical base for work assignment and promotion, and operated with a less centralized authority. In addition, senior administrators perceived a less self-imposed standard of control in conducting supervisory units than did supervisors.

The findings of differences in organizational characteristics indicate that positions in OPPECs associated with the perceptions of most organizational characteristics, but sizes of OPPECs seem to associate less strongly with perceptions of respondents.

# CHAPTER 6

# SATISFACTION OF RESPONDENTS WITH WORKLIFE IN THE SUPERVISORY UNITS

The results of the analysis of satisfaction with the organizational structure -- the job situation and overall satisfaction -- are presented in three sections. In the first section, data pertaining to the satisfaction of respondents working in the OPPEC supervisory units are presented. In the second section the degrees of satisfaction reported by respondents, across sizes of supervisory units, are reported. In the final section the differences in satisfaction across positions of respondents in the supervisory units are reported.

Analyses of the data in these three sections were guided by the research question which focused on the extent to which administrators and supervisors are satisfied with the organizational structure and their work responsibilities in the OPPEC supervisory units.

## A. SATISFACTION WITH ORGANIZATIONAL STRUCTURE

Senior administrators, section heads, and supervisors in the OPPEC supervisory units were asked to respond to questions with respect to satisfaction with the job situation and overall satisfaction. Each item had a six-point scale of "highly dissatisfied," "moderately dissatisfied," "slightly dissatisfied," "slightly satisfied," "moderately satisfied," and "highly satisfied." Each response was assigned a score of 1 to 6, respectively. Items on satisfaction with the job situation were factor analysed, the results yielded two factors, namely satisfaction with the operating structure and satisfaction with responsibilities. Two items were used to measure the overall satisfaction, they were related to "organization functions" and "the job." The scale scores and overall satisfaction scores are reported in Table 6.1.

**Table 6.1**
**Scale Scores on Satisfaction**

| Scale | Scale Scores/ Mean | S.D. | N |
|---|---|---|---|
| Satisfaction with the job situation | | | |
| Satisfaction with the Operating Structure | 3.87 | 0.76 | 377 |
| Satisfaction with Responsibilities | 4.13 | 0.78 | 377 |
| Overall Satisfaction | | | |
| Satisfaction with Organization Functions | 3.88 | 1.11 | 377 |
| Satisfaction with the Job | 4.22 | 1.05 | 377 |

Higher mean value indicates greater satisfaction.

Since the range of scale scores is from 1 to 6, points on scale are defined. A score of 3.5 is the mid-point. A score above 3.5 indicates a tendency towards satisfaction. If the score is below 3.5, the tendency is towards dissatisfaction.

As can be seen in Table 6.1, members in the supervisory units tend towards satisfaction on both scales measuring satisfaction with the job situation. They were relatively satisfied with the operating structure (mean = 3.87) and with their responsibilities (mean = 4.13). The same is true with the overall satisfaction measures. Respondents, on average, tend to be satisfied with organization functions (mean = 3.88) and with the job (mean = 4.22). On the basis of those scores they appear to be more satisfied with their responsibilities than with the operating structure, and more satisfied with the job than with the organization functions.

## B. DIFFERENCES IN SATISFACTION ACROSS SIZES OF OPPECs

As noted above, two scales were used to measure satisfaction with the job situation, and two items were used to measure overall satisfaction. Analysis of variance

was used to assess the significance of differences of means scale scores for respondents working in four sizes of OPPECs -- small, medium, large, and Bangkok. The Scheffé test was applied to identify the groups (classified by size of OPPECs) which were significantly different.

### Differences in Satisfaction Across Sizes of All OPPECs

Four groups of respondents were established on the basis of OPPEC size -- small, medium, large, and Bangkok. Four measures of satisfaction, as described above, were used in comparisons among these four groups. This analysis was guided by the following research question:

> What differences are there in satisfaction with the job situation and overall satisfaction reported by respondents working in the different sizes of supervisory units?

Results presented in Table 6.2 indicate that only "satisfaction with the operating structure" was significantly different across sizes of OPPECs at the .05 level; members of medium size OPPECs were more satisfied than members of small size OPPECs. Respondents working in OPPECs of varying sizes were similarly satisfied on "satisfaction with responsibilities," "satisfaction with organization functions," and "satisfaction with the job."

Inspection of the means (which are close to 4) reveals that, independent of size of OPPEC, respondents express only modest levels of satisfaction on all four satisfaction measures.

### Differences in Satisfaction by Position

Three positions -- senior administrator, section head, and supervisor -- were defined for analyzing differences in satisfaction across sizes of supervisory units.

**Table 6.2**
**Results of One-Way Analysis of Variance of Satisfaction of Respondents Working in OPPECs of Different Size**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| Satisfaction with the Job Situation | | | | | | |
| Satisfaction with the Operating Structure | 1.Small | 103 | 3.73 | 0.80 | 3.34* | 2-1 |
| | 2.Medium | 176 | 3.99 | 0.65 | | |
| | 3.Large | 86 | 3.83 | 0.88 | | |
| | 4.Bangkok | 12 | 3.59 | 0.62 | | |
| Satisfaction with Responsibilities | 1.Small | 103 | 4.08 | 0.78 | 1.71 | none |
| | 2.Medium | 176 | 4.22 | 0.77 | | |
| | 3.Large | 86 | 4.06 | 0.78 | | |
| | 4.Bangkok | 12 | 3.86 | 0.50 | | |
| Overall Satisfaction | | | | | | |
| Satisfaction with Organization Functions | 1.Small | 103 | 3.81 | 1.18 | 1.77 | none |
| | 2.Medium | 176 | 3.99 | 1.04 | | |
| | 3.Large | 86 | 3.76 | 1.16 | | |
| | 4.Bangkok | 12 | 3.42 | 0.90 | | |
| Satisfaction with the Job | 1.Small | 103 | 4.09 | 1.05 | 2.12 | none |
| | 2.Medium | 176 | 4.36 | 1.00 | | |
| | 3.Large | 86 | 4.13 | 1.19 | | |
| | 4.Bangkok | 12 | 3.92 | 0.51 | | |

* significant at .05 level

Higher mean value indicates greater satisfaction.

Senior Administrator Sample

As has been mentioned, because there are only two senior administrators in Bangkok, this category was excluded from the comparison using Analysis of Variance. The results reported in Table 6.3 relate to the following research question:

> What differences are there in satisfaction with the job situation and overall satisfaction reported by senior administrators working in the different sizes of supervisory units?

The results indicate that there were no significant differences among average satisfaction scores reported by senior administrators across OPPECs of varying sizes with respect to satisfaction with the job situation and overall satisfaction. This suggests that size of OPPECs is not related to the perceptions of senior administrators on satisfaction with their work or the organizational structure.

Examination of the means (which are higher than 4) reveals that, independent of size of OPPECs, senior administrators express a great satisfaction on all four measures.

Section Head Sample

Bangkok which employs only two section heads, was also excluded from the satisfaction analysis for section heads. Through this analysis, the following research question was addressed:

> What differences are there in satisfaction with the job situation and overall satisfaction reported by section heads working in the different sizes of supervisory units?

Results presented in Table 6.4 indicate that there was no significant difference in satisfaction with the job situation and overall satisfaction as perceived by section heads across the different sizes of supervisory units. This suggest that the perceptions of section heads with respect to satisfaction were not influenced by OPPEC size.

Inspection of the means (which are close to 4) reveals that, independent of size of OPPEC, section heads express only modest levels of satisfaction on all four satisfaction measures.

**Table 6.3**
**Results of One-Way Analysis of Variance of Satisfaction Across Sizes of OPPECs in the Senior Administrator Sample**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| Satisfaction with the Job Situation | | | | | | |
| Satisfaction with the Operating Structure | 1.Small | 23 | 4.21 | 0.61 | 0.39 | none |
| | 2.Medium | 38 | 4.30 | 0.63 | | |
| | 3.Large | 15 | 4.40 | 0.83 | | |
| Satisfaction with Responsibilities | 1.Small | 23 | 4.49 | 0.62 | 0.02 | none |
| | 2.Medium | 38 | 4.51 | 0.67 | | |
| | 3.Large | 15 | 4.53 | 0.79 | | |
| Overall Satisfaction | | | | | | |
| Satisfaction with Organization Functions | 1.Small | 23 | 4.44 | 1.24 | 0.35 | none |
| | 2.Medium | 38 | 4.42 | 0.86 | | |
| | 3.Large | 15 | 4.67 | 0.90 | | |
| Satisfaction with the Job | 1.Small | 23 | 4.39 | 0.84 | 0.88 | none |
| | 2.Medium | 38 | 4.68 | 0.81 | | |
| | 3.Large | 15 | 4.67 | 1.05 | | |

Higher mean value indicates greater satisfaction.

**Table 6.4**

**Results of One-Way Analysis of Variance of Satisfaction Across Sizes of OPPECs in the Section Head Sample**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| Satisfaction with the Job Situation | | | | | | |
| Satisfaction with the Operating Structure | 1.Small | 10 | 3.91 | 0.74 | 0.15 | none |
| | 2.Medium | 20 | 3.79 | 0.67 | | |
| | 3.Large | 6 | 3.73 | 0.80 | | |
| Satisfaction with Responsibilities | 1.Small | 10 | 3.93 | 0.89 | 0.12 | none |
| | 2.Medium | 20 | 4.10 | 1.02 | | |
| | 3.Large | 6 | 4.11 | 0.69 | | |
| Overall Satisfaction | | | | | | |
| Satisfaction with Organization Functions | 1.Small | 10 | 3.80 | 0.92 | 0.39 | none |
| | 2.Medium | 20 | 3.95 | 1.23 | | |
| | 3.Large | 6 | 3.50 | 0.84 | | |
| Satisfaction with the Job | 1.Small | 10 | 4.10 | 1.10 | 0.35 | none |
| | 2.Medium | 20 | 4.10 | 1.12 | | |
| | 3.Large | 6 | 4.50 | 0.84 | | |

Higher mean value indicates greater satisfaction.

Supervisor Sample

Although there were eight supervisors in Bangkok, this is still too small a number to compare with the numbers of supervisors in the other OPPEC size categories. The difference in number of supervisors between Bangkok and other sizes of OPPECs would associate with the test of significance among means; thus Bangkok was excluded from the analysis of data.

The analysis of data was guided by the following research question:

> What differences are there in satisfaction with the job situation and overall satisfaction reported by supervisors working in the different sizes of supervisory units?

Results presented in Table 6.5 indicate that supervisors working in OPPECs of varying sizes were similarly satisfied on "satisfaction with responsibilities," "satisfaction with organization functions," and "satisfaction with the job." However, there were significant differences in "satisfaction with the operating structure" ($p < .01$) as perceived by supervisors. Supervisors in medium size OPPECs were more satisfied than supervisors in small size OPPECs. This suggests that size of OPPECs is related to supervisors' perceptions of satisfaction with the operating structure, but size is not related to their perceptions of responsibilities and overall satisfaction.

In general, size of OPPECs is not a significant variable relating to members' satisfaction with their work or with perceptions organizational structure. Only "satisfaction with the operating structure" was associated with OPPEC size, and the difference was between small and medium size OPPECs. Further analysis indicates that supervisors working in small and medium size OPPECs were differently satisfied with the "operating structure." Senior administrators in small, medium, or large size OPPECs were similarly satisfied with the organizational structure and so were section heads in small, medium, and large size OPPECs.

**Table 6.5**
**Results of One-Way Analysis of Variance of Satisfaction Across Sizes of OPPECs in the Supervisor Sample**

| Factor | Size | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| Satisfaction with the Job Situation | | | | | | |
| Satisfaction with the Operating Structure | 1.Small | 70 | 3.54 | 0.80 | 5.95** | 2-1 |
| | 2.Medium | 118 | 3.92 | 0.63 | | |
| | 3.Large | 65 | 3.71 | 0.85 | | |
| Satisfaction with Responsibilities | 1.Small | 70 | 3.96 | 0.78 | 2.12 | none |
| | 2.Medium | 118 | 4.15 | 0.75 | | |
| | 3.Large | 65 | 3.94 | 0.76 | | |
| Overall Satisfaction | | | | | | |
| Satisfaction with Organization Functions | 1.Small | 70 | 3.60 | 1.13 | 1.95 | none |
| | 2.Medium | 118 | 3.86 | 1.03 | | |
| | 3.Large | 65 | 3.57 | 1.15 | | |
| Satisfaction with the Job | 1.Small | 70 | 3.99 | 1.10 | 2.69 | none |
| | 2.Medium | 118 | 4.30 | 1.02 | | |
| | 3.Large | 65 | 3.97 | 1.21 | | |

** significant at .01 level

Higher mean value indicates greater satisfaction.

## C. DIFFERENCES IN SATISFACTION ACROSS POSITIONS

Similar to the analysis of satisfaction across sizes of the OPPEC supervisory units, One-Way Analysis of Variance and Scheffé tests were used to examine the differences in satisfaction across positions in OPPECs. Three groups of respondents were established on the basis of position in OPPECs. They were senior administrators, section heads, and supervisors. Bangkok was again excluded from the analysis of data because it has only twelve respondents which consists of two senior administrators, two section heads, and eight supervisors.

### Differences in Satisfaction Across Positions of Respondents

Through the analysis of data in this part, the following research question was addressed:

> What differences are there in satisfaction with the job situation and overall satisfaction reported by respondents working in the various positions in OPPECs?

Results presented in Table 6.6 indicate that there were significant differences among average satisfaction scores across positions in OPPECs with respect to both satisfaction with the job situation and overall satisfaction. Senior administrators were more satisfied with the operating structure, with their responsibilities, and with organization functions than were section heads and supervisors. Senior administrators were more satisfied with the job than were supervisors. This clearly shows that superiors of the OPPEC supervisory units are more satisfied than subordinates.

Inspection of the means (which are close to 4) reveals that, independent of positions in OPPEC, respondents express only modest levels of satisfaction on all four satisfaction measures.

**Table 6.6**

**Results of One-Way Analysis of Variance of Satisfaction of Respondents Working in Various Positions in OPPECs**

| Factor | Position | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| Satisfaction with the Job Situation | | | | | | |
| Satisfaction with the Operating Structure | 1.Senior Admin. | 78 | 4.28 | 0.66 | 15.85*** | 1-3, 1-2 |
| | 2.Section Head | 38 | 3.82 | 0.68 | | |
| | 3.Supervisor | 261 | 3.75 | 0.76 | | |
| Satisfaction with Responsibilities | 1.Senior Admin. | 78 | 4.50 | 0.67 | 11.34*** | 1-3, 1-2 |
| | 2.Section Head | 38 | 4.06 | 0.89 | | |
| | 3.Supervisor | 261 | 4.04 | 0.76 | | |
| Overall Satisfaction | | | | | | |
| Satisfaction with Organization Functions | 1.Senior Admin. | 78 | 4.45 | 0.99 | 14.85*** | 1-3, 1-2 |
| | 2.Section Head | 38 | 3.84 | 1.05 | | |
| | 3.Supervisor | 261 | 3.70 | 1.09 | | |
| Satisfaction with the Job | 1.Senior Admin. | 78 | 4.46 | 0.88 | 5.53** | 1-3 |
| | 2.Section Head | 38 | 4.18 | 1.04 | | |
| | 3.Supervisor | 261 | 4.12 | 1.08 | | |

** significant at .01 level

*** significant at .001 level

Higher mean value indicates greater satisfaction.

## Differences in Satisfaction by OPPEC Size

Three sizes of OPPEC supervisory units -- small, medium, and large -- were defined for analyzing differences in satisfaction across positions of respondents.

### Small Size OPPECs

The analysis of data across positions in small size OPPECs was guided by the following research question:

> What differences are there in satisfaction with the job situation and overall satisfaction reported by respondents working in the various positions in small size OPPECs?

Results reported in Table 6.7 indicate that there were significant differences among average satisfaction scores across positions of respondents working in small size OPPECs with respect to "satisfaction with operating structure" ($p < .01$), "satisfaction with responsibilities" ($p < .05$), and "satisfaction with organization functions" ($p < .05$). However, the results show that the differences in satisfaction across positions of respondents on these three measures of satisfaction were found only between senior administrators and supervisors. Senior administrators had higher scores on these three satisfaction measures than supervisors. This suggests that superiors in small size OPPECs are more satisfied than subordinates with their responsibilities or organizational structure.

Inspection of the means (which are close to 4) reveals that, independent of positions in OPPEC, respondents working in small size OPPECs express only modest levels of satisfaction on all four satisfaction measures.

### Medium Size OPPECs

The analysis of data presented in Table 6.8 answers the following research question:

> What differences are there in satisfaction with the job situation and overall satisfaction reported by respondents working in the various positions in medium size OPPECs?

**Table 6.7**

**Results of One-Way Analysis of Variance of Satisfaction of Small Size OPPECs Across Position of Respondents**

| Factor | Position | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| Satisfaction with the Job Situation | | | | | | |
| Satisfaction with the Operating Structure | 1.Senior Admin. | 23 | 4.21 | 0.61 | 6.94** | 1-3 |
| | 2.Section Head | 10 | 3.91 | 0.74 | | |
| | 3.Supervisor | 70 | 3.54 | 0.80 | | |
| Satisfaction with Responsibilities | 1.Senior Admin. | 23 | 4.49 | 0.62 | 4.45* | 1-3 |
| | 2.Section Head | 10 | 3.93 | 0.89 | | |
| | 3.Supervisor | 70 | 3.96 | 0.78 | | |
| Overall Satisfaction | | | | | | |
| Satisfaction with Organization Functions | 1.Senior Admin. | 23 | 4.43 | 1.24 | 4.64* | 1-3 |
| | 2.Section Head | 10 | 3.80 | 0.92 | | |
| | 3.Supervisor | 70 | 3.60 | 1.13 | | |
| Satisfaction with the Job | 1.Senior Admin. | 23 | 4.39 | 0.84 | 1.30 | none |
| | 2.Section Head | 10 | 4.10 | 1.10 | | |
| | 3.Supervisor | 70 | 3.90 | 1.10 | | |

* significant at .05 level

** significant at .01 level

Higher mean value indicates greater satisfaction.

**Table 6.8**

**Results of One-Way Analysis of Variance of Satisfaction of Medium Size OPPECs Across Position of Respondents**

| Factor | Position | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| Satisfaction with the Job Situation | | | | | | |
| Satisfaction with the Operating Structure | 1.Senior Admin. | 38 | 4.30 | 0.63 | 6.12** | 1-2, 1-3 |
| | 2.Section Head | 20 | 3.79 | 0.67 | | |
| | 3.Supervisor | 118 | 3.92 | 0.63 | | |
| Satisfaction with Responsibilities | 1.Senior Admin. | 38 | 4.51 | 0.67 | 3.44* | 1-3 |
| | 2.Section Head | 20 | 4.10 | 1.02 | | |
| | 3.Supervisor | 118 | 4.15 | 0.75 | | |
| Overall Satisfaction | | | | | | |
| Satisfaction with Organization Functions | 1.Senior Admin. | 38 | 4.42 | 0.86 | 4.41* | 1-3 |
| | 2.Section Head | 20 | 3.95 | 1.23 | | |
| | 3.Supervisor | 118 | 3.86 | 1.03 | | |
| Satisfaction with the Job | 1.Senior Admin. | 38 | 4.68 | 0.81 | 2.99 | none |
| | 2.Section Head | 20 | 4.10 | 1.12 | | |
| | 3.Supervisor | 118 | 4.30 | 1.02 | | |

* significant at .05 level

** significant at .01 level

Higher mean value indicates greater satisfaction.

There were differences among average satisfaction scores across positions in medium size OPPECs with respect to "satisfaction with the operating structure" ($p < .01$), "satisfaction with responsibilities" ($p < .05$), and "satisfaction with organization functions" ($p < .05$), but there was no significant difference across positions in medium size OPPECs in "satisfaction with the job."

Senior administrators in medium size OPPECs were more satisfied with the "operating structure" than section heads and supervisors. Senior administrators were also more satisfied with "responsibilities" and "organization functions" than supervisors. However, senior administrators, section heads, and supervisors were similarly satisfied on "satisfaction with the job." That is, position in OPPECs is related to perceptions of members of medium size OPPECs; this is especially true of senior administrators and supervisors.

Inspection of the means (which are close to 4) reveals that, independent of positions in OPPEC, respondents working in medium size OPPECs express only modest levels of satisfaction on all four satisfaction measures.

Large Size OPPECs

This analysis of data was guided by the following research question:

> What differences are there in satisfaction with the job situation and overall satisfaction reported by respondents working in the various positions in large size OPPECs?

Results presented in Table 6.9 indicate that there were significant differences across positions in large size OPPECs with respect to "satisfaction with the operating structure," "satisfaction with responsibilities" at the .05 level, and "satisfaction with organization functions" at the .01 level. However, there was no significant difference in "satisfaction with the job."

Senior administrators in large size OPPECs were more satisfied with the "operating structure" and "responsibilities" than were supervisors. Senior administrators

**Table 6.9**

**Results of One-Way Analysis of Variance of Satisfaction of Large Size OPPECs Across Position of Respondents**

| Factor | Position | N | Mean | S.D. | F | Significant Differences |
|---|---|---|---|---|---|---|
| Satisfaction with the Job Situation | | | | | | |
| Satisfaction with the Operating Structure | 1.Senior Admin. | 15 | 4.40 | 0.83 | 4.15* | 1-3 |
| | 2.Section Head | 6 | 3.73 | 0.80 | | |
| | 3.Supervisor | 65 | 3.71 | 0.85 | | |
| Satisfaction with Responsibilities | 1.Senior Admin. | 15 | 4.53 | 0.79 | 3.68* | 1-3 |
| | 2.Section Head | 6 | 4.11 | 0.69 | | |
| | 3.Supervisor | 65 | 3.94 | 0.76 | | |
| Overall Satisfaction | | | | | | |
| Satisfaction with Organization Functions | 1.Senior Admin. | 15 | 4.67 | 0.90 | 6.34** | 1-2, 1-3 |
| | 2.Section Head | 6 | 3.50 | 0.84 | | |
| | 3.Supervisor | 65 | 3.57 | 1.15 | | |
| Satisfaction with the Job | 1.Senior Admin. | 15 | 4.67 | 1.05 | 2.51 | none |
| | 2.Section Head | 6 | 4.50 | 0.84 | | |
| | 3.Supervisor | 65 | 3.97 | 1.21 | | |

* significant at .05 level

** significant at .01 level

Higher mean value indicates greater satisfaction.

were also more satisfied with "organization functions" than section heads and supervisors. However, senior administrators, section heads, and supervisors were similarly satisfied on "satisfaction with the job." This suggests that position of respondents in large size OPPECs is related to their perceptions on satisfaction with their work or with the organizational structure. This is especially true of senior administrators and supervisors.

Inspection of the means (which are close to 4) reveals that, independent of positions in OPPEC, respondents working in large size OPPECs express only modest levels of satisfaction on all four satisfaction measures.

Results reported in Table 6.6 to 6.9 show that there were significant differences among average satisfaction scores across positions in OPPECs with respect to their work or the organizational structure. These differences were especially pronounced in satisfaction with the job situation and organization functions. For most of the results, the differences in satisfaction across positions of respondents were found between senior administrators and supervisors. There was no significant difference in satisfaction with the organizational structure between section heads and supervisors. This suggests that position in OPPECs is related to respondents' perceptions of satisfaction with their work or the organizational structure. This is especially true of differences in perceptions between senior administrators and supervisors.

**Satisfaction of Respondents in Bangkok Supervisory Unit**

The means of all four satisfaction measures which are close to 4 are presented in Table 6.10. This table shows that, independent of position of respondents, satisfaction of members in Bangkok supervisory unit tends to be modest on all four satisfaction measures.

**Table 6.10**
**Scale Scores on Satisfaction of Bangkok Supervisory Unit**

| Scale | Scale Scores/ Mean | S.D. | N |
|---|---|---|---|
| Satisfaction with the job situation | | | |
| Satisfaction with the Operating Structure | 3.59 | .62 | 12 |
| Satisfaction with Responsibilities | 3.86 | .50 | 12 |
| Overall Satisfaction | | | |
| Satisfaction with Organization Functions | 3.42 | .90 | 12 |
| Satisfaction with the Job | 3.92 | .51 | 12 |

Higher mean value indicates greater satisfaction.

## D. SUMMARY

This chapter presented results of the analysis of satisfaction with the organizational structure which consisted of satisfaction with the job situation and overall satisfaction. These results indicate that members in OPPEC supervisory units were slightly satisfied with the organizational structure, and that there were differences across sizes of supervisory units and across positions in OPPECs.

The analysis of data reveals that most of satisfaction measures did not vary with OPPEC size. For example, members of medium size OPPECs reported greater "satisfaction with the operating structure" than did members of small size OPPECs. As well, supervisors in medium size OPPECs were more satisfied than supervisors in small size OPPECs.

Results show that position of respondents was related to most of the satisfaction measures. For example, all senior administrators, independent of size of OPPECs, reported more "satisfaction with the job situation" and "satisfaction with organization

functions" than did section heads and supervisors; and senior administrators reported greater "satisfaction with the job" than did supervisors. In small and medium size OPPECs, senior administrators reported greater "satisfaction with the job situation" and "satisfaction with organization functions" than did supervisors. Results in large size OPPECs were similar to results received from small and medium size OPPECs, with one exception; senior administrators were more satisfied with "organization functions" than section heads and supervisors.

# CHAPTER 7

# RELATIONSHIP BETWEEN SATISFACTION WITH THE ORGANIZATIONAL STRUCTURE AND ORGANIZATIONAL CHARACTERISTICS

In the two previous chapters the organizational characteristics of the OPPEC supervisory units and the satisfaction of respondents in the units have been described. This chapter explores the relationship between satisfaction with the organizational structure and organizational characteristics. In addition, predictors of satisfaction with the organizational structure are determined.

## A. SATISFACTION AND ORGANIZATIONAL CHARACTERISTICS

The six scales described in Chapter Four were used to measure organizational characteristics. This section analyzes the relationships among these variables which was guided by the following research question:

> What is the relationship between various indicators of satisfaction and the organizational characteristics of supervisory units?

Pearson product-moment correlation coefficients were computed. The analysis of data was done for the sample as a whole, for the various sizes of OPPECs (small, medium, large, and Bangkok), and for the various positions in the OPPECs (senior administrator, section head, and supervisor).

### Results for All OPPECs

The Pearson correlation coefficients between pairs of variables are reported in Table 7.1. As is indicated in Table 7.1, two relationships were significant at the .05 level; one was significant at the .01 level; sixteen were significant at the .001 level; and five were not significant. Twelve pairs of variables were significantly and negatively

**Table 7.1**

**Correlation Between Satisfaction and Organizational Characteristics of All OPPECs**

(N = 377)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | -.59*** | -.50*** | -.52*** | -.46*** |
| Procedural Specification | .40*** | .36*** | .38*** | .34*** |
| Control of Supervisors | .11* | .11* | .14** | .06 |
| Administrative Authority | -.06 | -.09 | -.02 | -.05 |
| Bases for Work Assignment and Promotion | -.44*** | -.39*** | -.39*** | -.29*** |
| Hierarchy of Authority | -.34*** | -.22*** | -.24*** | -.18*** |

* significant at .05 level

** significant at .01 level

*** significant at .001 level

correlated, and seven pairs were significantly and positively correlated. Further inspection of Table 7.1 reveals that there were no correlation coefficients greater than .60 in the 24 relationships.

Relatively strong relationships, with correlation coefficients significant at the .001 level, were found between all four satisfaction measures and each of the following organizational characteristics:

- the climate of supervisory work ($-.59 \leq r \leq -.46$)
- procedural specification ($.34 \leq r \leq .40$)
- bases for work assignment and promotion ($-.44 \leq r \leq -.29$)
- hierarchy of authority ($-.34 \leq r \leq -.18$)

Table 7.1 shows that "administrative authority" was not statistically correlated ($p > .05$) with any measure of satisfaction. It also indicates that "control of supervisors" was only weakly correlated with three satisfaction measures and not correlated significantly with the fourth.

Interpretation of the results presented in Table 7.1 shows that satisfaction of members of the supervisory units, measured in four different ways, tends to be associated with an autonomous climate of supervisory work, higher procedural specification, higher professional/technical bases for work assignment and promotion, and greater decentralization of authority.

**Results for Small Size OPPECs**

Table 7.2 presents the correlation coefficients between pairs of variables in small size OPPECs. As shown in Table 7.2, twenty relationships were significant; six were significant at the .05 level and fourteen at the .001 level. Sixteen pairs of variables were significantly and negatively correlated, and four pairs were significantly and positively correlated. Further inspection of Table 7.2 reveals that there were only two correlation coefficients greater than .60 in the 24 relationships. These two coefficients were found

**Table 7.2**

**Correlation Between Satisfaction and Organizational Characteristics of Small Size OPPECs**

(N = 103)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | -.69*** | -.51*** | -.68*** | -.54*** |
| Procedural Specification | .41*** | .42*** | .48*** | .45*** |
| Control of Supervisors | .003 | .11 | .08 | .02 |
| Administrative Authority | -.21* | -.21* | -.25* | -.20* |
| Bases for Work Assignment and Promotion | -.48*** | -.36*** | -.46*** | -.33*** |
| Hierarchy of Authority | -.46*** | -.20* | -.38*** | -.22* |

* significant at .05 level

*** significant at .001 level

between "the climate of supervisory work" and two satisfaction measures, the first and the third.

Relatively strong relationships, with correlation coefficients significant at the .001 level, were found between all four satisfaction measures and each of the following organizational characteristics:

- the climate of supervisory work ($-.69 \leq r \leq -.51$)
- procedural specification ($.41 \leq r \leq .48$)
- bases for work assignment and promotion ($-.48 \leq r \leq -.33$)

Table 7.2 shows that "hierarchy of authority" was strongly correlated ( $-.46 \leq r \leq -.38$ with $p < .001$) with two satisfaction measures, the first and the third, and less strongly correlated with the second and the fourth ( $-.22 \leq r \leq -.20$ with $p < .05$). Table 7.2 also indicates that "administrative authority" was weakly correlated with all four satisfaction measures ($-.25 \leq r \leq -.20$). Only "control of supervisors" was not significantly correlated ($p > .05$) with any measure of satisfaction.

Interpretation of the results presented in Table 7.2 shows that satisfaction of members of small size OPPECs, measured in four different ways, tends to be associated with an autonomous climate of supervisory work, higher procedural specification, higher professional/technical bases for work assignment and promotion, and greater decentralization of authority.

**Results for Medium Size OPPECs**

The correlation between pairs of variables is presented in Table 7.3 for medium size OPPECs. Fifteen relationships were significant; one was significant at the .05 level, two at the .01 level, and twelve at the .001 level. Eleven pairs of variables were significantly and negatively correlated, and four pairs were significantly and positively correlated.

Table 7.3

**Correlation Between Satisfaction and Organizational Characteristics of Medium Size OPPECs**

(N = 176)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | -.61*** | -.47*** | -.41*** | -.41*** |
| Procedural Specification | .33*** | .29*** | .24*** | .19** |
| Control of Supervisors | .11 | .07 | .14 | -.03 |
| Administrative Authority | -.01 | -.07 | .11 | .04 |
| Bases for Work Assignment and Promotion | -.43*** | -.39*** | -.29*** | -.24*** |
| Hierarchy of Authority | -.26*** | -.21** | -.13 | -.15* |

* significant at .05 level

** significant at .01 level

*** significant at .001 level

Further inspection of Table 7.3 reveals that there was only one correlation coefficients greater than .60 in the 24 relationships. This coefficient was found between "the climate of supervisory work" and the first measure of satisfaction.

Relatively strong relationships, with correlation coefficients significant at the .001 level, were found between all four satisfaction measures and each of the following organizational characteristics:

- the climate of supervisory work ($-.61 \leq r \leq -.41$)
- bases for work assignment and promotion ($-.43 \leq r \leq -.24$)

In addition, on three of the four satisfaction measures, with correlation coefficients significant at the .001 level, were found for "procedural specification" ($.24 \leq r \leq .33$). The fourth measure of satisfaction was less strongly correlated with this characteristic ($r = .19$ with $p < .01$). Table 7.3 also shows that on three of the four satisfaction measures, a statistically significant correlation was found for "hierarchy of authority" ($-.26 \leq r \leq -.15$). Two characteristics, "control of supervisors" and "administrative authority," were not statistically correlated with any measure of satisfaction.

Interpretation of the results presented in Table 7.3 shows that satisfaction of members of medium size OPPECs, measured in four different ways, tends to be associated with an autonomous climate of supervisory work, higher procedural specification, higher professional/technical bases for work assignment and promotion. In addition, the greater decentralization of authority tends to be associated with two satisfaction measures -- operating structure and responsibilities.

**Results for Large Size OPPECs**

Results shown in Table 7.4 indicate that seventeen relationships were significant; three were significant at the .05 level, one at the .01 level, and thirteen at the .001 level. Twelve pairs of variables were significantly and negatively correlated, and five pairs were

**Table 7.4**

**Correlation Between Satisfaction and Organizational Characteristics of Large Size OPPECs**

(N = 86)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | -.52*** | -.55*** | -.51*** | -.49*** |
| Procedural Specification | .49*** | .33** | .49*** | .42*** |
| Control of Supervisors | .17 | .18 | .20 | .22* |
| Administrative Authority | -.05 | -.07 | -.04 | -.09 |
| Bases for Work Assignment and Promotion | -.52*** | -.51*** | -.53*** | -.42*** |
| Hierarchy of Authority | -.42*** | -.34*** | -.27* | -.22* |

* significant at .05 level

** significant at .01 level

*** significant at .001 level

significantly and positively correlated. Further inspection of Table 7.4 reveals that there were no correlation coefficients greater than .60 in the 24 relationships that were studied.

Relatively strong relationships, with correlation coefficients significant at the .001 level, were found between all four satisfaction measures and each of the following organizational characteristics:

- the climate of supervisory work ($-.55 \leq r \leq -.49$)
- bases for work assignment and promotion ($-.53 \leq r \leq -.42$)

In addition, relatively strong relationships, with correlation coefficients significant at the .001 level, were found between three of the four satisfaction measures and "procedural specification" ($.42 \leq r \leq .49$). One measure of satisfaction, the second, was less strongly correlated with this characteristic ($r = .33$ with $p < .01$). Table 7.4 also shows that "hierarchy of authority" was strongly correlated ($-.42 \leq r \leq -.34$ with $p < .001$) with the first two satisfaction measures, and less strongly correlated with the other two satisfaction measures ($-.27 \leq r \leq -.22$ with $p < .05$). "Control of supervisors" was only weakly correlated with one satisfaction measure, the fourth, and not correlated significantly with the other three satisfaction measures. Only "administrative authority" was not statistically correlated ($p > .05$) with any measure of satisfaction.

Interpretation of the results presented in Table 7.4 shows that satisfaction of members of large size OPPECs, measured in four different ways, tends to be associated with an autonomous climate of supervisory work, higher procedural specification, higher professional/technical bases for work assignment and promotion, and greater decentralization of authority.

**Results for Bangkok Supervisory Unit**

Results presented in Table 7.5 indicate that only three relationships were significant at the .05 level. The significant relationships were between the third measure of satisfaction, organization functions, and both "the climate of supervisory work" and

**Table 7.5**

**Correlation Between Satisfaction and Organizational Characteristics of Bangkok Supervisory Unit**

**(N = 12)**

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | -.51 | -.36 | -.69* | -.07 |
| Procedural Specification | .52 | .65* | .17 | .53 |
| Control of Supervisors | .43 | .52 | .14 | .19 |
| Administrative Authority | .50 | .20 | -.03 | -.13 |
| Bases for Work Assignment and Promotion | -.54 | -.31 | -.57 | -.27 |
| Hierarchy of Authority | -.26 | .22 | -.65* | .06 |

* significant at .05 level

"hierarchy of authority" (r = -.69 and -.65, respectively); as well, the second measure of satisfaction, responsibilities, was significantly correlated with "procedural specification" (r = .65).

Interpretation of the results presented in Table 7.5 shows that, the more autonomous the climate of supervisory work and the more decentralized the authority was perceived to be, the more satisfied members in Bangkok supervisory unit were with "organization functions." In addition, the more satisfied members of Bangkok supervisory unit were with "responsibilities" the greater their perceptions of high procedural specification.

**Results for Senior Administrator Sample**

Results reported in Table 7.6 indicate that eleven relationships were significant; five were significant at the .05 level and six at the .001 level. Eight pairs of variables were significantly and negatively correlated, and three pairs were significantly and positively correlated.

Inspection of Table 7.6 reveals that, for the senior administrator group statistically significant correlations were found between all four satisfaction measures, on the one hand, and each of the following measures of organizational characteristics, on the other:

- the climate of supervisory work ($-.48 \leq r \leq -.39$)
- bases for work assignment and promotion ($-.40 \leq r \leq -.27$)

In addition, on three of the four satisfaction measures a statistically significant correlation was found for "procedural specification" ($.23 \leq r \leq .29$). Table 7.6 also shows that "control of supervisors," "administrative authority," and "hierarchy of authority" were not statistically correlated ($p > .05$) with any measure of satisfaction.

The correlations shown in Table 7.6 indicate that the more autonomous the climate of supervisory work is perceived to be and the more professional/technical bases are perceived to be emphasized in work assignment and promotion were applied, the more

Table 7.6

Correlation Between Satisfaction and Organizational Characteristics of Senior Administrator Sample

(N = 78)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | -.41*** | -.39*** | -.47*** | -.48*** |
| Procedural Specification | .14 | .23* | .29* | .25* |
| Control of Supervisors | .11 | .13 | .16 | .19 |
| Administrative Authority | -.17 | -.20 | .08 | .02 |
| Bases for Work Assignment and Promotion | -.27* | -.27* | -.40*** | -.38*** |
| Hierarchy of Authority | -.15 | -.03 | -.06 | -.08 |

* significant at .05 level

*** significant at .001 level

satisfied senior administrators were with their job responsibilities and the organizational structure. In addition, the more satisfied senior administrators were with "responsibilities" and "overall satisfaction," the more they perceived high procedural specification.

**Results for Section Head Sample**

Results presented in Table 7.7 show that ten pairs of variables were significantly and negatively correlated; four were significant at the .05 level, and six at the .001 level.

Inspection of Table 7.7 reveals that, for the section head group statistically significant correlations were found between all four satisfaction measures, on the one hand, and each of the following measures of organizational characteristics, on the other:

- the climate of supervisory work ($-.68 \leq r \leq -.54$)
- hierarchy of authority ($-.63 \leq r \leq -.38$)

In addition, on two of the four satisfaction measures a statistically significant correlation was found for "bases for work assignment and promotion" ($-.34 \leq r \leq -.32$). Table 7.7 also shows that three characteristics -- "procedural specification," "control of supervisors," and "administrative authority" -- were not statistically correlated ($p > .05$) with any measure of satisfaction.

As is indicated in Table 7.7, the more autonomous the climate of supervisory work and the more decentralized the authority were perceived to be, the more satisfied section heads were with their job responsibilities and the organizational structure. Furthermore, the greater their perceptions of the application of professional/technical bases for work and promotion, the greater their overall satisfaction.

**Results for Supervisor Sample**

As shown in Table 7.8, fifteen relationships were significant; two were significant at the .01 level, and thirteen at the .001 level. Eleven pairs of variables were

**Table 7.7**

**Correlation Between Satisfaction and Organizational Characteristics of Section Head Sample**

(N = 38)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | -.55*** | -.57*** | -.68*** | -.54*** |
| Procedural Specification | .29 | .17 | .21 | .19 |
| Control of Supervisors | .11 | .14 | .17 | .02 |
| Administrative Authority | -.16 | -.21 | -.14 | -.18 |
| Bases for Work Assignment and Promotion | -.31 | -.28 | -.34* | -.32* |
| Hierarchy of Authority | -.38* | -.38* | -.52*** | -.63*** |

* significant at .05 level

*** significant at .001 level

**Table 7.8**

**Correlation Between Satisfaction and Organizational Characteristics of Supervisor Sample**

(N = 261)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | -.59*** | -.46*** | -.46*** | -.42*** |
| Procedural Specification | .44*** | .37*** | .39*** | .35*** |
| Control of Supervisors | .03 | .05 | .06 | -.02 |
| Administrative Authority | -.01 | -.05 | -.02 | -.05 |
| Bases for Work Assignment and Promotion | -.41*** | -.36*** | -.31*** | -.21*** |
| Hierarchy of Authority | -.31*** | -.17** | -.17** | -.09 |

** significant at .01 level

*** significant at .001 level

significantly and negatively correlated, and four pairs were significantly and positively correlated.

Inspection of Table 7.8 reveals that, for the supervisor group relatively strong relationships, with correlation coefficients significant at the .001 level, were found between all four satisfaction measures and each of the following organizational characteristics:

- the climate of supervisory work ($-.59 \leq r \leq -.42$)
- procedural specification ($.35 \leq r \leq .44$)
- bases for work assignment and promotion ($-.41 \leq r \leq -.21$)

In addition, on three of the four satisfaction measures a statistically significant correlation was found for "hierarchy of authority" ($-.31 \leq r \leq -.17$). Table 7.8 also shows that two organizational characteristics -- "control of supervisors" and "administrative authority" -- were not statistically correlated ($p > .05$) with any measure of satisfaction.

Interpretation of the results presented in Table 7.8 shows that satisfaction of supervisors, measured in four different ways, tends to be associated with an autonomous climate of supervisory work, higher procedural specification, and higher professional/ technical bases for work assignment and promotion, and greater decentralization of authority.

The results of the relationships between four satisfaction measures and organizational characteristics clearly showed that most organizational characteristics were significantly correlated with most measures of satisfaction.

## B. PREDICTORS OF SATISFACTION WITH THE ORGANIZATIONAL STRUCTURE

A stepwise multiple regression analysis was done in order to examine which organizational characteristics (independent variables) were predictors of each the four

satisfaction variables. The stepwise multiple regression technique allows the independent variables to be introduced sequentially depending upon their explanatory power (Nie et al., 1975:9).

This analysis of data was done across overall OPPECs, sizes of OPPECs (small, medium, large, and Bangkok), and positions in the OPPECs (senior administrator, section head, and supervisor). It was guided by the following research question:

> To what extent are factors of organizational characteristics significant predictors of satisfaction with the organizational structure?

Tables D.7.1 to D.7.30 in the Appendix D report the results of the multiple regression analysis. These tables show the multiple correlation coefficients (R); coefficients of multiple determination ($R^2$); and the gain in variance for any additional independent variable which accounted for variance in the dependent variable. For purposes of interpretation, the results presented in Tables D.7.1 to D.7.30 are summarized and reported in Table 7.9 to 7.16. In these tables, the coefficients of multiple determination ($R^2$) attributed to the independent variables (organizational characteristics) that were entered in the stepwise computations at the .05 level of significance and beyond are reported for each of the four dependent variables of satisfaction with the organizational structure. The total $R^2$ (or total variance) in each satisfaction measure (criterion) that was explained by the independent variables is also reported in Tables 7.9 to 7.16.

**Predictors of Satisfaction: Total Sample of Respondents from OPPECs**

As shown in Table 7.9, the major predictor of satisfaction with the organizational structure was "the climate of supervisory work." The proportion of the variance in the four satisfaction measures accounted for by this organizational characteristic ranged from 21 to 35 percent. Only two other organizational characteristics accounted for additional variance at levels which were statistically significant -- "procedural specification" and

**Table 7.9**

**Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: Total Sample of Respondents from OPPECs**

(N = 377)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | .35 | .25 | .27 | .21 |
| Procedural Specification | .04 | .03 | .04 | .03 |
| Control of Supervisors | - | - | - | - |
| Administrative Authority | - | - | - | - |
| Bases for Work Assignment and Promotion | .01 | .01 | .01 | - |
| Hierarchy of Authority | - | - | - | - |
| Total $R^2$ / Total Variance | .40 | .29 | .32 | .24 |

"bases for work assignment and promotion" -- but these contributions were minor in comparison with "the climate of supervisory work."

**Predictors of Satisfaction: Sample of Respondents from Different Sizes of OPPECs**

The predictors of satisfaction with organizational structure of small, medium, and large size OPPECs were slightly different and they were different from Bangkok. The following were the results received from respondents working in different sizes of OPPECs.

Small Size OPPECs

Results presented in Table 7.10 show that "the climate of supervisory work" was the major predictor of satisfaction with organizational structure of respondents working in small size OPPECs. The proportion of the variance in the four satisfaction measures accounted for by this organizational characteristic ranged from 26 to 47 percent. Only two other organizational characteristics accounted for additional variance at levels which were statistically significant -- "procedural specification" and "bases for work assignment and promotion" -- but these contributions were minor in comparison with "the climate of supervisory work."

Medium Size OPPECs

Table 7.11 shows that "the climate of supervisory work" was the major predictor of satisfaction with organizational structure of respondents working in medium size OPPECs. The proportion of the variance in the four satisfaction measures accounted for by this organizational characteristic ranged from 17 to 37 percent. Only two other organizational characteristics accounted for additional variance, not in the fourth satisfaction measure, at levels which were statistically significant -- "bases for work

**Table 7.10**

**Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: Respondents Working in Small Size OPPECs**

(N = 103)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | .47 | .26 | .47 | .29 |
| Procedural Specification | - | .05 | .04 | .05 |
| Control of Supervisors | - | - | - | - |
| Administrative Authority | - | - | - | - |
| Bases for Work Assignment and Promotion | .03 | - | - | - |
| Hierarchy of Authority | - | - | - | - |
| Total $R^2$ / Total Variance | .50 | .31 | .51 | .34 |

**Table 7.11**

**Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: Respondents Working in Medium Size OPPECs**

(N = 176)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | .37 | .23 | .17 | .17 |
| Procedural Specification | - | - | - | - |
| Control of Supervisors | - | - | - | - |
| Administrative Authority | - | - | .02 | - |
| Bases for Work Assignment and Promotion | .01 | .02 | - | - |
| Hierarchy of Authority | - | - | - | - |
| Total $R^2$ / Total Variance | .38 | .25 | .19 | .17 |

assignment and promotion" and "administrative authority" -- but these contributions were minor in comparison with "the climate of supervisory work."

Large Size OPPECs

As shown in Table 7.12, "the climate of supervisory work" was the major predictor of two satisfaction measures -- "responsibilities" and "the job." The proportion of the variance in these two satisfaction measures accounted for by this organizational characteristic were 31 and 24 percent, respectively. Only two other organizational characteristics accounted for additional variance at levels which were statistically significant -- "bases for work assignment and promotion" and "procedural specification" -- but these contributions were minor in comparison with "the climate of supervisory work."

Table 7.12 also shows that "bases for work assignment and promotion" was the major predictor of the other two satisfaction measures -- "operating structure" and "organization functions." The proportion of the variance in these two satisfaction measures accounted for by this organizational characteristic were 27 and 28 percent, respectively. Three organizational characteristics accounted for additional variance at levels which were statistically significant -- "procedural specification," "hierarchy of authority," and "the climate of supervisory work" -- but these contributions were minor in comparison with "bases for work assignment and promotion."

Bangkok Supervisory Unit

The results shown in Table 7.13 reveal that in Bangkok supervisory unit there were no predictors of two satisfaction measures -- "operating structure" and "the job." Only "proeedural specification" was the predictor of the second satisfaction measure -- "responsibilities"; the proportion of the variance in this satisfaction measure accounted for by "procedural specification" was 43 percent.

**Table 7.12**

**Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: Respondents Working in Large Size OPPECs**

**(N = 86)**

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | - | .31 | .04 | .24 |
| Procedural Specification | .07 | - | .07 | .07 |
| Control of Supervisors | - | - | - | - |
| Administrative Authority | - | - | - | - |
| Bases for Work Assignment and Promotion | .27 | .04 | .28 | - |
| Hierarchy of Authority | .07 | - | - | - |
| Total $R^2$ / Total Variance | .41 | .35 | .39 | .31 |

**Table 7.13**

**Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: Respondents Working in Bangkok Supervisory Unit**

**(N = 12)**

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | - | - | .47 | - |
| Procedural Specification | - | .43 | - | - |
| Control of Supervisors | - | - | - | - |
| Administrative Authority | - | - | - | - |
| Bases for Work Assignment and Promotion | - | - | - | - |
| Hierarchy of Authority | - | - | - | - |
| Total $R^2$ / Total Variance | - | .43 | .47 | - |

As is indicated in Table 7.13, "the climate of supervisory work" was the only predictor of the third satisfaction measure -- "organization functions." The proportion of the variance in this satisfaction measure accounted for by "the climate of supervisory work" was 47 percent.

Generally, the major predictor of most of satisfaction measures of any size of OPPECs was "the climate of supervisory work." "Bases for work assignment and promotion" and "procedural specification" were the minor predictors. "Hierarchy of authority" and "administrative authority" were predictors of only one satisfaction measure and "control of supervisors" was not a predictor of any measure of satisfaction.

**Predictors of Satisfaction: Sample of Respondents Working in Various Positions in OPPECs**

Three positions in OPPECs were defined for analyzing the predictors of satisfaction with organizational structure -- senior administrator, section head, and supervisor.

Senior Administrator Sample

As presented in Table 7.14, "the climate of supervisory work" was the only predictor of satisfaction with the organizational structure for the senior administrator sample. The proportion of the variance in the four satisfaction measures accounted for by this organizational characteristic ranged from 15 to 23 percent.

Section Head Sample

Results presented in Table 7.15 shows that "the climate of supervisory work" was the only predictor of three satisfaction measures. The proportion of the variance in these three satisfaction measures accounted for by "the climate of supervisory work" ranged from 31 to 47 percent. Table 7.15 also shows that "hierarchy of authority" was the only

**Table 7.14**

**Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: The Senior Administrator Sample**

**(N = 78)**

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | .16 | .15 | .22 | .23 |
| Procedural Specification | - | - | - | - |
| Control of Supervisors | - | - | - | - |
| Administrative Authority | - | - | - | - |
| Bases for Work Assignment and Promotion | - | - | - | - |
| Hierarchy of Authority | - | - | - | - |
| Total $R^2$ / Total Variance | .16 | .15 | .22 | .23 |

**Table 7.15**

**Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: The Section Head Sample**

(N = 38)

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | .31 | .33 | .47 | - |
| Procedural Specification | - | - | - | - |
| Control of Supervisors | - | - | - | - |
| Administrative Authority | - | - | - | - |
| Bases for Work Assignment and Promotion | - | - | - | - |
| Hierarchy of Authority | - | - | - | .40 |
| Total $R^2$ / Total Variance | .31 | .33 | .47 | .40 |

predictor of one satisfaction measure -- the fourth. The proportion of the variance in this satisfaction measure accounted for by "hierarchy of authority" was 40 percent.

Supervisor Sample

As is indicated in Table 7.16, "the climate of supervisory work" was the major predictor of satisfaction with the organizational structure of supervisor sample. The proportion of the variance in the four satisfaction measures accounted for by this organizational characteristic ranged from 18 to 35 percent. Only two other organizational characteristics accounted for additional variance at levels which were statistically significant -- "procedural specification" and "bases for work assignment and promotion" -- but these contributions were minor in comparison with "the climate of supervisory work."

## C. SUMMARY

Pearson product-moment correlation was used to determine the relationship between various indicators of satisfaction and organizational characteristics of the OPPECs. Stepwise multiple regression analysis was used to determine the extent to which factors of organizational characteristics were statistically significant predictors of satisfaction with the organizational structure.

Correlation indicated that in all the OPPECs "the climate of supervisory work," "procedural specification," "bases for work assignment and promotion," and "hierarchy of authority" were significantly correlated with all four measures of satisfaction. As well "control of supervisors" was significantly correlated with some variables of satisfaction with the organizational structure. The results from small, medium, and large size OPPECs show results similar to those found for total sample of respondents. This was also true of the results from the supervisor sample. In Bangkok supervisory unit, most organizational characteristics were not significantly correlated with satisfaction measures.

**Table 7.16**

**Summary of Proportion of Variance in the Satisfaction as Criterion ($R^2$) Explained by Organizational Characteristics (Predictors) in the Stepwise Multiple Regression Analysis: The Supervisor Sample**

**(N = 261)**

| Organizational Characteristics | Satisfaction with the Job Situation | | Overall Satisfaction | |
|---|---|---|---|---|
| | Operating Structure | Responsibilities | Organization Functions | Job |
| The Climate of Supervisory Work | .35 | .22 | .21 | .18 |
| Procedural Specification | .06 | .05 | .06 | .05 |
| Control of Supervisors | - | - | - | - |
| Administrative Authority | - | - | - | - |
| Bases for Work Assignment and Promotion | .02 | .02 | - | - |
| Hierarchy of Authority | - | - | - | - |
| Total $R^2$ / Total Variance | .43 | .29 | .27 | .23 |

In the senior administrator and section head samples, only some organizational characteristics were significantly correlated with some variables of satisfaction with the organizational structure.

The stepwise multiple regression analysis indicated that, in general, "the climate of supervisory work" was by far the best predictors of satisfaction. In selected analyses "procedural specification" and "bases for work assignment and promotion" were good predictors. "Hierarchy of authority" and "administrative authority" were weak predictors; "control of supervisors" was not a predictor in any of the analyses.

# CHAPTER 8

# DISCUSSION OF THE FINDINGS

This chapter highlights the findings that have emerged from analysis of the data. In the first section, the bureaucratic characteristics of the OPPECs are discussed. Second, the discussion focuses on satisfaction with the organizational structure and with the job itself as reported by respondents who work in the OPPECs. Finally, the relationships among the variables of organizational characteristics and satisfaction with the organizational structure are discussed.

## A. ORGANIZATIONAL CHARACTERISTICS EMERGING FROM THE ANALYSIS

In Chapter Four the researcher concluded that bureaucratic characteristics of supervisory units in Thailand were quite different from comparable organizations in western countries such as Canada. A factor analysis yielded seven dimensions of bureaucratic characteristics but only six could be meaningfully interpreted. They are (1) the climate of supervisory work, (2) procedural specification, (3) control of supervisors, (4) administrative authority, (5) bases for work assignment and promotion, and (6) hierarchy of authority. Only two of the dimensions are similar to the Weberian model of bureaucracy: procedural specification and hierarchy of authority. According to MacKay (1964; 74-76), and Robinson (1966: 116-118), these two dimensions are positively and significantly interrelated. However, in this study these two bureaucratic dimensions were not correlated. Indeed, there is a low negative correlation ($r = -.05$) which is not statistically significant. This leads to the conclusion that the variables "procedural specification" and "hierarchy of authority" in Thai bureaucracy are somewhat different from those in the Weberian model. Furthermore, the findings of this study do not

support Weber's view that all bureaucratic dimensions are positively related (Weber, 1946: 110-113). This means that the bureaucratic dimensions identified in this study have some features different from those described by Weber, and that each dimension measures different aspects of the organizational characteristics of supervisory units in Thailand. Three dimensions which share common bureaucratic elements are (1) the climate of supervisory work, (2) bases for work assignment and promotion, and (3) hierarchy of authority. The intercorrelation between each of these three dimensions and the total organizational characteristic score are .67, .60, and .85, respectively, in which the percentage of variance accounted for was about 45 percent, 36 percent, and 72 percent, respectively.

**Perceptions of Organizational Characteristics Across Sizes of Supervisory Units**

Researchers disagree on whether or not the size of the organization is related to bureaucratic characteristics. Robinson (1966) and Hall and Title (1966) found that size was not significantly related to bureaucratic characteristics. Their findings contradicted those of MacKay (1964) and of Pugh and his associates (1969) who discovered that size was related to degree of bureaucratization. The pattern of findings in this study is not consistent. The size of supervisory units was related to four dimensions, namely (1) the climate of supervisory work, (2) procedural specification, (3) bases for work assignment and promotion, and (4) "hierarchy of authority." Large size OPPECs are rated more bureaucratic than medium and small size OPPECs with respect to "the climate of supervisory work," and they are perceived to be more bureaucratic than Bangkok with respect to "hierarchy of authority." However, large size OPPECs seem to be less bureaucratic than medium size OPPECs with respect to "procedural specification." Furthermore, small size OPPECs are perceived as more bureaucratic than medium and large size OPPECs with respect to "bases for work assignment and promotion." This

study found that size was related to the degree of bureaucracy; nevertheless, the results agree with those of Hall (1966) in that a large organization was not necessarily more or less bureaucratic than a small one.

The size of the organization was not related to the perceptions of administrators (senior administrators and section heads). Size did associate with the perceptions of non-administrative members (supervisors) with respect to two bureaucratic dimensions -- procedural specification and bases for work assignment and promotion. Supervisors in medium size OPPECs perceived greater bureaucracy than did those in small and large size OPPECs with respect to "procedural specification"; however, supervisors in small size OPPECs perceived greater bureaucracy than did supervisors in medium and large size OPPECs with respect to "bases for work assignment and promotion."

"Control of supervisors" and "administrative authority" are two bureaucratic characteristics of supervisory units which are not related to OPPEC size. The first dimension deals with the performance of administrators and supervisors, and the second relates to the authority of administrators over supervisors. These two dimensions tend to involve relationships among members of the supervisory units. They may include the kinds of informal structures which Hoy and Miskel (1982: 88-91) suggest are important factors in the creation of efficient operations in bureaucratic organizations. The scale scores of "control of supervisors" and "administrative authority" were 1.99 and 2.74, respectively. These relatively low scores indicate a low degree of bureaucracy. The behaviors of members were controlled by self-imposed standards, and administrative authority had an informal orientation. The Thai cultural context which emphasizes personal relationships may be the most significant factor which influences these perceptions of a low degree of bureaucracy.

**Perceptions of Organizational Characteristics Across Positions in OPPECs**

Comparing the size of the supervisory units to the positions held by the respondents in the OPPECs, it was found that the position was related to the perception of bureaucratic characteristics to a greater degree than was the size of the OPPEC. Only the "administrative authority" dimension was perceived in a similar way by senior administrators, section heads, and supervisors. Most of the significant differences in the perceptions of organizational characteristics were between senior administrators, on the one hand, and section heads and supervisors on the other. Section heads and supervisors had similar perceptions of bureaucratic characteristics. The results revealed that senior administrators perceived greater bureaucracy with respect to "procedural specification" and "bases for work assignment and promotion," and less bureaucracy with respect to "the climate of supervisory work" and "hierarchy of authority" when compared to both section heads and supervisors.

The structure of supervisory units in Thailand is basically bureaucratic as is the structure of schools. Supervisors and section heads are concerned primarily with academic matters while senior administrators are concerned with the general operation of supervisory units. This may result in supervisors and section heads having similar perceptions of bureaucracy; however, their perceptions were different from those of senior administrators. Senior administrators perceived "the climate of supervisory work" to be more autonomous and "hierarchy of authority" to be less centralized than did supervisors and section heads. On the other hand, senior administrators perceived that the supervisory units applied more standard procedures, used more professional/technical bases for work assignment and promotion, and used more organization-imposed standards of control than did section heads and supervisors. The contradictory perceptions among respondents who hold different positions may result in conflicts between superiors (senior administrators) and subordinates (section heads and supervisors). These findings may support those of Hoy and Miskel (1982:112-113).

They suggested that one source of organizational conflict is between subordinates who have a colleague reference orientation and administrators who have a hierarchical orientation. A second kind of conflict occurs as a result of subordinates' desire for autonomy in decision making and administrators' expectation of disciplined compliance. As well, conflict arises from the desire of subordinates to exercise self-imposed standards of control and the demands of administrators for subordination to organizational control.

A comparison of perceptions of bureaucratic characteristics across position of respondents in each size of OPPECs revealed that there were significant differences among the three positions of respondents in medium and large size OPPECs but not in small size OPPECs. The perceptions of bureaucratic characteristics of members in different positions in small size OPPECs are similar. The number of members in the supervisory units and experience in supervisory work may be factors which are associated with members' perceptions. The fact that there are fewer members in small size OPPECs may result in closer interpersonal relationships and a more autonomous interpersonal climate. These kinds of relationships are characteristic of Thai society. Background of respondents in terms of previous position may be another factor relating to the perceptions of senior administrators in small size OPPECs. Half of the senior administrators in small size OPPECs had been in "head supervisor, section head, and supervisor" positions whereas only one-fourth of those in medium size OPPECs and one-third of those in large size OPPECs had held those positions previously. Senior administrators in small size OPPECs tended to have more experience in supervisory work than did senior administrators in the other sizes of OPPECs. This may contribute to similarities in the perceptions of bureaucratic characteristics.

## B. SATISFACTION WITH ORGANIZATIONAL STRUCTURE

According to Steers (1977:38-45) and Hoy and Miskel (1982:333-339), job satisfaction may be used as a criterion of organizational effectiveness. Based on this assumption, the supervisory units in the Thai OPPECs as experienced by their members tended towards being effective organizations. The average scores of members of the supervisory units who took part in this study were in the "slightly satisfied" area on all satisfaction variables -- satisfaction with the job situation (satisfaction with the operating structure and satisfaction with responsibilities) and overall satisfaction (satisfaction with organization functions and satisfaction with the job).

A comparison of satisfaction among members of OPPECs revealed that size is not a significant variable relating to the level of satisfaction. Only one significant difference was found: members in medium size OPPECs expressed greater satisfaction with the operating structure than did members in small size OPPECs, and further analysis revealed that this difference was the result of supervisor responses. There was no significant difference in any other satisfaction variables among respondents working in small, medium, and large size OPPECs. Hence, the findings of this study do not show that members of smaller size OPPECs -- in which there are likely to be closer interpersonal relationships -- are more satisfied with the organizational structure than are members of larger size OPPECs.

The findings from an analysis of data across positions in OPPECs showed that position is related to the level of satisfaction. Generally, senior administrators expressed more satisfaction than did section heads and supervisors; section heads and supervisors were satisfied to the same degree. These findings support those of French et al., (1985:377) who stated that "There is greater job satisfaction as people move up the hierarchy. Superiors are more satisfied than subordinates at all levels." Though section heads are higher in the hierarchy than supervisors, both groups expressed the same

degree of satisfaction. This can be explained by two factors -- the work structure of Thai organizations and the Thai cultural context.

From the researcher's experience (the researcher has worked in Thai organizational structure similar to that found in OPPECs and has worked with people in supervisory units for more than ten years), directors of organizations at the "division" level are powerful persons in that they have full authority to manage tasks in their "division." All OPPECs which are classified as "division" level also have the same work structure. All documents that enter and leave OPPECs must be signed by the director or by an assistant director/head supervisor authorized by the director. Since these signed documents have to be recorded, the signature of a senior administrator is needed. In addition, all tasks have to be approved by senior administrators and decisions are made at this level.

Section heads' responsibilities, on the other hand, include making recommendations to senior administrators, working with supervisors or others in or outside of the office, and liaison between senior administrators and supervisors. Section heads do not have authority to sign documents entering or leaving the OPPECs or to approve projects which need to be recorded. The authority of senior administrators is very different from that of section heads, even though section heads are also administrators. In practice, section heads have closer relationships with supervisors than with senior administrators. The relationship between section heads and supervisors is like that between friends, and has a quality significantly different from that between administrators and subordinates. The reason may be that section heads are accustomed to working with supervisors as colleague before they were promoted to section heads. The data support this view: 39.5 percent of section heads in OPPECs were supervisors previously. Of section heads in small, medium, and large size OPPECs, 70.0, 30.0, and 33.3 percent, respectively, had previously been supervisors.

Thai culture may influence the relationships between senior administrators, on the one hand, and section heads and supervisors, on the other. Section heads and supervisors are expected to pay respect to senior administrators, and to maintain same degree of social distance, even though they may have been friends and colleagues at one time. Friendship behaviors between senior administrators, section heads, and supervisors may be not be acceptable in a work situation because the "hierarchy" of positions is emphasized. Thais accepted this as natural, as Williams (1983;18) has stated.

## C. RELATIONSHIP BETWEEN SATISFACTION AND ORGANIZATIONAL CHARACTERISTICS

Investigation of the relationship among organizational characteristic and satisfaction variables and the identification of predictors of satisfaction were also major objectives of this study.

### Relationships Among Variables

As the findings indicated, satisfaction of members of OPPECs was high where they perceived a low degree of bureaucracy in "the climate of supervisory work" and "hierarchy of authority." Their satisfaction was also high where members perceived a high degree of bureaucracy in "procedural specification" and "bases for work assignment and promotion." In addition, their "satisfaction with the job situation" and "satisfaction with organization functions" was high where they perceived a high degree of bureaucracy in "control of supervisors." This supports the speculation that only some aspects of bureaucratic characteristics may enhance satisfaction.

Furthermore, the findings show that, over all, members of OPPECs were more satisfied with a professional orientation than with a bureaucratic orientation. The autonomous climate of supervisory work, decentralization of authority, high procedural

specification, and high professional/technical bases for work assignment and promotion increase the satisfaction of members of OPPECs.

The analysis of relationships among organizational characteristics and satisfaction across sizes of OPPECs revealed that the findings with respect to each of the small, medium, and large size OPPECs were similar to overall findings with respect to all respondents working in OPPECs. Only findings with respect to small size OPPECs were slightly different from those with respect to other sizes of OPPECs. This single difference was that the satisfaction of members of small size OPPECs was higher where they perceived a low degree of bureaucracy in "administrative authority." In other words, they were more satisfied when the administrators emphasized informal authority. Perhaps members of small organizations have closer relationships and a more autonomous interpersonal climate exists among members, a relationship which is characteristic of Thai society. Apart from this single finding, there was no further evidence that variations in the size of the OPPEC are associated with the satisfaction of respondents working in OPPECs.

When position of respondents was defined for analyzing, a more interesting picture came to light. Irrespective of the size of the OPPEC, the satisfaction of respondents tended to be high where members perceived a low degree of bureaucracy in "the climate of supervisory work" and "hierarchy of authority," and a high degree of bureaucracy in "procedural specification" and "bases for work assignment and promotion." The further analysis across positions of the respondents in OPPECs revealed that there were different findings with respect to senior administrator, section head, and supervisor samples. In all three, members of each sample tended to be more satisfied the more autonomous the "climate of supervisory work." The relationship between satisfaction and other organizational characteristics of each sample was different.

The findings from these three samples show that in the supervisor sample more organizational characteristics correlated significantly with the satisfaction variables than in

the section head and senior administrator samples. One possible explanation is that supervisors tend to be sensitive to the degree of bureaucracy and that organizational characteristics associate with their satisfaction more than they associate with the satisfaction of section heads and senior administrators.

**Predictors of Satisfaction with the Organizational Structure**

The analysis showed that "the climate of supervisory work" was the most important variable for predicting the variation in most of the satisfaction variables, based on data reported by respondents working in OPPECs -- in all, in small, in medium, and in large size OPPECs including Bangkok, and in senior administrator, section head, and supervisor samples. This single predictor accounted for between 4 to 47 percent of the variance in the satisfaction variables. "Procedural specification" and "bases for work assignment and promotion" were the other two organizational characteristics which predicted variation in satisfaction. These two organizational characteristics had very limited predictive usefulness, however. For all intents and purposes, "hierarchy of authority," "control of supervisors," and "administrative authority" did not contribute to the explanation of the variation in any satisfaction variables, in any samples. This leads to the conclusion that it is not necessary to use all organizational characteristics as predictors of satisfaction. Because "the climate of supervisory work" was not only the best predictor of satisfaction it was the most important characteristic (it had the largest eigenvalue -- see Table 4.1) and it is the most characteristic of supervisory units in Thailand (it had the highest correlation, $r = .67$, with total score of organizational characteristics -- see Table 4.10). Consequently, "the climate of supervisory work" may be used to predict work related satisfaction without other predictors.

## D. SUMMARY

According to the results of this study, organizational characteristics of the supervisory units in Thailand differed from the Weberian model. The discussion points out that, generally, size is not an important factor relating to the perceptions of respondents regarding organizational characteristics. The position of the respondents, however, associates with their perceptions. Similarly, an analysis of satisfaction across sizes of supervisory units and positions in OPPECs revealed that position was a more important variable relating to members' satisfaction with the organizational structure and the job itself than the size of the OPPECs.

"The climate of supervisory work," "procedural specification," and "bases for work assignment and promotion" were important sources for predicting the variation in satisfaction on the various satisfaction measures. The scales which this study used to measure satisfaction are useful, but only these three scales have substantial ability to assess satisfaction of respondents working in the supervisory units.

# CHAPTER 9

# SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This final chapter summarizes the study. The first section provides an overview of the background and methodology of the study and in the second section a summary of the findings is presented. Conclusions are presented in the third section while the fourth section offers some recommendations.

## A. REVIEW OF BACKGROUND AND METHODOLOGY

This section highlights (a) background and purposes of the research, (b) conceptual framework, and (c) research methodology.

### Background and Purpose of the Study

In 1980 the seventy-three Offices of the Provincial Primary Education Commissions (OPPECs) in Thailand were established under the Office of the National Primary Education Commission (ONPEC) in an attempt to give greater unity to the administration of government primary schools. Administration of primary education at the provincial level became the responsibility of the OPPECs; all supervisory units at the provincial level, which had been under the Department of General Education (DGE), were transferred to the OPPECs. In this new administrative structure, the functions of the supervisory unit in each province were largely unchanged, but the functions and roles of the staff members in the supervisory units, especially those of administrators, were changed in significant ways. According to the new administrative structure, the Head Supervisor, who used to have the same status as the Director, now was to be accountable to the Director and/or the Assistant Director. After the reorganization some Head Supervisors ignored the new administrative structure and persisted with efforts to operate their units independently. The conflict which resulted was gradually resolved through

transfers of administrators at the senior level. Although the organizational structures of the OPPECs now appear to have stabilized, the characteristics of the structure may still vary among the OPPECs.

The intent of this study was to describe and analyze the organizational characteristics of the OPPEC supervisory units in Thailand, and to investigate the satisfaction of administrators and supervisors with their work responsibilities and the organizational structure. Furthermore, the relationship between various measures of satisfaction of OPPEC staff members and the organizational characteristics of the OPPECs were explored. To these ends, the following research questions were formulated:

1. To what extent are bureaucratic dimensions evident in the operation of OPPEC supervisory units?

2. To what extent are administrators and supervisors satisfied with the job situations in these supervisory units?

3. What is the relationship between satisfaction with the job situations and the organizational characteristics of the supervisory units?

The relationships of OPPEC size and position of respondents to perceptions of organizational characteristics and degree of satisfaction were also explored.

## Conceptual Framework

The Weberian model of bureaucracy provided the basis for the conceptual framework employed in the study. Working from this model, Hall (1961), MacKay (1964), and Robinson (1966) developed six scales to measure the bureaucratic characteristics of an organization. The researcher adapted these scales to measure the bureaucratic characteristics of supervisory units at the provincial level in Thailand. As well, satisfaction scales were developed based on the six dimensions of organizational

characteristics. The various dimensions of bureaucratic structure and employee satisfaction were considered to be major variables in this study.

## Research Methodology

The design of this study was based on the survey method of data collection and quantitative techniques of analysis. The survey questionnaire was distributed to supervisors and administrators working in 25 OPPECs identified by a stratified random sampling procedure.

### The Sample

The stratification of the sample was based on two factors: (1) number of supervisors in the OPPEC supervisory unit, and (2) number of primary schools under the OPPEC of each province. Twenty-four randomly selected OPPECs were classified into 7 small size, 12 medium size, and 5 large size. In addition, the OPPEC in Bangkok was selected. As a result, there were 377 respondents in the study: 78 senior administrators, 38 section heads, and 261 supervisors.

### The Instrument

The questionnaire used to collect data in this study was first written in English and later translated into Thai. Only the Thai version was used in data collection. The questionnaire consisted of three parts: (1) organizational characteristics, (2) satisfaction with the job situation and overall satisfaction, and (3) background data. A pilot test of the instrument was carried out, and the revised questionnaire was used to collect data. Appropriate tests were used to establish the validity and reliability of the instrument.

### Analysis of Data

Descriptive statistics and tests of significance were used to analyze data gathered in this study. The techniques applied to analyze the data were as follows: (1) factor analysis, (2) frequency distributions, (3) Pearson product-moment correlation

coefficients, (4) t-tests, (5) one-way analysis of variance, and (6) stepwise multiple regression.

## B. SUMMARY OF THE FINDINGS

In relation to the purpose of the study, the major findings are summarized under the following topics: (a) organizational characteristics of OPPEC supervisory units, (b) employee satisfaction, (c) relationship between satisfaction and organizational characteristics, and (d) predictors of satisfaction.

### Organizational Characteristics

To define the scales for describing organizational characteristics, factor analysis with oblique rotation was employed. The seven-factor solution was selected but only six factors were used to define scales; factor 3 was rejected because it could not be interpreted. The six factors were labelled as follows: (1) the climate of supervisory work, (2) procedural specification, (3) control of supervisors, (4) administrative authority, (5) bases for work assignment and promotion, and (6) hierarchy of authority. The reliability of each scale was statistically significant at the .001 level. Most scales were intercorrelated, and all of them were significantly correlated with the total score.

#### The Climate of Supervisory Work

The items in this factor pertained to the assignment of responsibilities of supervisors and the working conditions under which supervisors carry out these responsibilities. The mean score of 2.70 indicated that "the climate of supervisory work" tended slightly towards an autonomous climate.

Statistically significant differences in perceptions of "the climate of supervisory work" across different sizes of OPPECs and across different positions were found. Regarding OPPEC size, the differences were between members in large size OPPECs, on

the one hand, and small and medium size OPPECs, on the other, when the total sample was considered. The members of large size OPPECs rated "the climate of supervisory work" in their organization as less autonomous than did members of small and medium size OPPECs. On the basis of position of respondents, the differences were between senior administration, on the one hand, and section heads and supervisors, on the other, for the total sample and for each size of OPPECs, with the single exception of small size OPPECs. Senior administrators perceived a more autonomous climate for supervisory work than did section heads and supervisors.

Procedural Specification

The items selected for this factor describe the procedures which supervisors are expected to follow when performing their roles. The mean score (3.72) indicated that the degree of procedural specification in the supervisory units tended towards precise specification.

There were statistically significant differences in perceptions of "procedural specification" across sizes of OPPECs and across positions in OPPECs. The difference in perception across sizes of OPPECs was in the supervisor sample. Across positions, the difference in perceptions was found between senior administrators, on the one hand, and the section heads and supervisors, on the other, for the total sample and between senior administrator and supervisors for large size OPPECs; senior administrators perceived the supervisory units to have more precisely specified procedures than did section heads and supervisors.

Control of Supervisors

The mean score of this factor (1.99) indicated that control of the supervisor's conduct tended to be self-imposed rather than organization-imposed.

Two statistically significant differences in perceptions of "control of supervisors" across positions in OPPECs were found: between senior administrators and supervisors

in the total sample and in large size OPPECs -- senior administrators as compared to supervisors perceived a lesser tendency for control to be self-imposed in the supervisory units.

Administrative Authority

This factor pertained to the authority of administrators in the supervisory units, especially head supervisors. The mean score of 2.74 suggests that the behavior of administrators tended slightly away from the explicit exercise of formal authority towards the informal exercise of authority. There were no statistically significant differences in perceptions of "administrative authority" across sizes of OPPECs and across positions in OPPECs.

Bases for Work Assignment and Promotion

This factor referred to the bases for promotion and the way work was assigned to supervisors. Both technical qualifications and personal factors seem to be considered in assigning tasks to supervisors. The mean score of 3.39 indicated that there is some tendency towards the use of factors in addition to purely technical/professional factors, in work assignment and promotion.

There were statistically significant differences in perceptions of "bases for work assignment and promotion" across sizes of OPPECs and across positions in OPPECs. When the total sample and the supervisor sample were considered, differences were found between respondents working in small size OPPECs, on the one hand, and medium and large size OPPECs, on the other; members of small size OPPECs perceived that their supervisory units used non-technical bases for work assignment and promotion less than did members of medium and large size OPPECs. Regarding the respondents' position, a difference in perception was found between senior administrators, on the one hand, and the section heads and supervisors, on the other. Senior administrators

perceived that technical qualifications were more strongly emphasize than did section heads and supervisors.

Hierarchy of Authority

The mean score of this scale (3.55) suggests a relatively strong emphasis on hierarchy in the administrative organization of the OPPECs. Position held by respondents in OPPECs was related to respondents' perceptions of "hierarchy of authority." When the total sample and medium size OPPECs were considered, differences were observed between senior administrators, on the one hand, and section heads and supervisors, on the other. Senior administrators perceived less emphasis on administrative hierarchy than did section heads and supervisors. Size of OPPEC was associated with the perceptions of members when the total sample was analyzed; members of large size OPPECs perceived a stronger emphasis on "hierarchy of authority" than did members of OPPEC Bangkok.

## Satisfaction

Four satisfaction measures were used in the analyses: (1) two scale scores (based on the factor analysis) and (2) two overall measures of satisfaction.

Satisfaction with the Job Situation

Using the factor analysis technique, the two-factor solution was selected to define scales to measure satisfaction with the job situation: (1) satisfaction with the operating structure, and (2) satisfaction with responsibilities.

Satisfaction with the Operating Structure

The items selected for this factor described various ways in which the work of the organization was done. The mean score of 3.87 indicated that members in the OPPEC supervisory units tend towards satisfaction with the operating structure.

Findings pertaining to "satisfaction with the operating structure" are accentuated in the following circumstances:

(1) when the total sample and the supervisor sample are considered, size of OPPEC is related to satisfaction of respondents; i.e., respondents working in medium size OPPECs are more satisfied than respondents working in small size OPPECs.

(2) the position held by respondents in OPPECs is related to their satisfaction; i.e., in the total sample and in medium size OPPECs, senior administrators are more satisfied than section heads and supervisors, and in small and large size OPPECs, senior administrators are more satisfied than supervisors.

Satisfaction with Responsibilities

The mean score of 4.13 indicated that members in the OPPEC supervisory units tend towards satisfaction with their responsibilities. They are more satisfied with their responsibilities than they are with the operating structure.

The findings pertaining to this satisfaction measure are as follows: (1) position held by respondents is related to their satisfaction: senior administrators are more satisfied than supervisors for the total sample, and they are more satisfied than section heads and supervisors for each OPPEC size; and (2) size of OPPECs is not associated with members' satisfaction with their responsibilities.

Overall Satisfaction

Two items were used as scales to measure overall satisfaction: (1) satisfaction with organization functions, and (2) satisfaction with the job. The means on both items (3.88 and 4.22, respectively) for members working in the OPPEC supervisory units fell into the "slightly satisfied" range.

The following findings pertaining to the overall satisfaction are more evident:

(1) size of OPPEC is not associated with overall satisfaction of respondents working in the supervisory units;

(2) position held by respondents in OPPECs is related to "satisfaction with organization functions" when the total sample and each size of OPPECs are considered;

(3) when the total sample is considered, senior administrators are more satisfied with their job than supervisors.

**Relationship Between the Satisfaction Measures and Organizational Characteristics**

Three major sets of findings pertained to the relationship between satisfaction and organizational characteristics:

(1) when the total sample is considered, "the climate of supervisory work," "hierarchy of authority," "procedural specification," and "bases for work assignment and promotion" are strongly correlated with all four satisfaction measures. The less bureaucratic the organization is on the first two organizational characteristics and the more bureaucratic it is on the last two characteristics, the higher is the satisfaction.

(2) when size of OPPEC is considered, all four satisfaction measures correlate with the following organizational characteristics:

- in small size OPPECs, all scales of organizational characteristics except "control of supervisors";
- in medium size OPPECs, "the climate of supervisory work," "procedural specification," "bases for work assignment and promotion";
- in large size OPPECs, "the climate of supervisory work," "procedural specification," "bases for work assignment and promotion," and "hierarchy of authority."

(3) when position held by respondents in OPPECs is considered, all four satisfaction measures correlated significantly with the following organizational characteristics:

- in the senior administrator sample, "the climate of supervisory work" and "bases for work assignment and promotion;
- in the section head sample, "the climate of supervisory work" and "hierarchy of authority";
- in the supervisor sample, "the climate of supervisory work," "procedural specification," and "bases for work assignment and promotion."

## Predictors of Satisfaction

A stepwise multiple regression analysis was carried out in order to explore the predictors of satisfaction.

### Predictors of Satisfaction with the Operating Structure and Predictors of Satisfaction with Organization Functions

The findings pertaining to "satisfaction with the operating structure" and "satisfaction with organization functions" are as follows: (1) when the total sample is considered, "the climate of supervisory work" is the major predictor; (2) the same result is found when size of OPPEC and position held by respondents are considered except the major predictor in large size OPPECs is "bases for work assignment and promotion."

### Predictors of Satisfaction with Responsibilities

When the total sample is considered, "the climate of supervisory work" is the major predictor. The same result is found when size of OPPEC and position held by respondents in OPPECs are considered, except that the major predictor for the section head sample is "hierarchy of authority."

Predictors of Satisfaction with the job

When the total sample is considered, "the climate of supervisory work" is found to be the major predictor. The same result is found when size of OPPEC and position held by respondents in OPPECs are considered.

## C. CONCLUSIONS

Of the six dimensions of organizational characteristics of supervisory units identified in this study, only two -- procedural specification and hierarchy of authority -- were similar to those identified in earlier studies. The differences in dimensions may be due, in part, to the uniqueness of OPPECs as professional organizational and, in part, to differences in the cultural and social contexts of organizations in Thailand as compared to western countries.

Although there are variations in organizational characteristics across supervisory units, there was a general tendency in these characteristics towards an autonomous climate, a self-imposed standard of control, informal authority, non-technical bases for work assignment and promotion, precisely specified procedures, and centralization of authority. Of these characteristics, variations in the degree of member autonomy (climate of supervisory work) were the most significant in relation to the variables explored in this study.

The results of this study show that the position held by the respondents is a more significant variable relating to perceptions of organizational characteristics of supervisory units in Thailand than is the OPPEC size. Differences in perceptions were found between senior administrators, on the one hand, and section heads and supervisors, on the other. The differences in perceptions among positions may be the result of differences in responsibilities; senior administrators are concerned more with the general operation of

supervisory units while section heads and supervisors are concerned primarily with academic matters.

Size was not a significant factor in relation to variations in respondent satisfaction in the organizations included in this study. The findings across sizes of supervisory units show that size is not consistently associated with the satisfaction of respondents working in OPPECs. This is to say, it cannot be concluded that a smaller OPPEC size contributes to greater satisfaction of staff members than a large OPPECs -- or vice versa.

Position in OPPECs, however, was related to satisfaction of members working in supervisory units. Generally, senior administrators were more satisfied with their work responsibilities and with the organizational structure than section heads and supervisors, while section heads and supervisors were equally satisfied. This may be because of the work structure of Thai organizations and the Thai cultural context. Senior administrators exercise authority over all members but section heads do not have a right to command supervisors. Both section heads and supervisors have a duty to obey senior administrators and they are expected to pay respect to senior administrators while section heads and supervisors may have been friends and colleagues at one time.

Analysis of the relationship between satisfaction and organizational characteristics shows that four dimensions of organizational characteristics were significantly correlated with all four satisfaction measures. Members of OPPECs expressed greater satisfaction when they perceived a lower degree of bureaucracy on "the climate of supervisory work" and "hierarchy of authority" dimensions, and a higher degree of bureaucracy on "procedural specification" and "bases for work assignment and promotion." Furthermore, there is some evidence to suggest that a higher degree of bureaucracy on "control of supervisors" and a lower degree of bureaucracy on "administrative authority" may contribute to greater satisfaction. This leads to the conclusion that a higher (or

lower) degree of bureaucracy does not necessarily result in greater satisfaction. It all depends on the dimension.

Position held by respondents was related to most of the relationships explored between satisfaction and organizational characteristics; only "control of supervisors" and "administrative authority" were not correlated with any satisfaction measures in any samples. The analysis revealed that there were different findings with respect to senior administrator, section head, and supervisor samples. In the supervisor sample more organizational characteristics correlated significantly with satisfaction variables than in the other two samples. This suggests that supervisors tended to be more sensitive to the degree of bureaucracy and that organizational characteristics related more to their satisfaction than they related to the satisfaction of senior administrators and section heads.

The best predictor of satisfaction with the organizational structure was "the climate of supervisory work." It contributed to total variance more than any other scale, and its domination of the stepwise multiple regression analyses establishes that it is not necessary to use all organizational characteristics as predictors of satisfaction. If a causal relationship can be assumed, then a basis is established for attempting to influence satisfaction by changing specific features of the organizational structure.

## D. RECOMMENDATIONS

This study focused on the bureaucratic characteristics of the supervisory units in Thailand. In this regard, the findings contribute to the view that research on bureaucratic characteristics must be context specific. The implications of this view will be considered in the following recommendations.

## Recommendations for Research

1. The scales used to measure bureaucratic characteristics and satisfaction with the organizational structure provide a basis for developing a more comprehensive instrument; however, they require modification to make them more suitable for Thai organizations.

2. Since the organizational characteristics in Thailand differ from those of western countries, qualitative research procedures such as observation and interview should be used in order to enhance findings.

3. Because the cultural context seems so important in giving shape to bureaucratic characteristics, further research should include the study of cultural context and social characteristics. This is especially true if the methodology applied in this study is used to measure bureaucratic characteristics in different geographical areas of Thailand where the cultural context and social characteristics differ slightly.

4. Future studies should be undertaken in other Thai organizations -- professional and nonprofessional organizations -- to ensure that the scales used in this study are valid and reliable in a range of organizations which are not staffed exclusively by professionals.

## Recommendations for Practice

1. The findings of this study revealed that organizational characteristics were related to satisfaction. To improve the supervisory system in the OPPEC supervisory units, administrators in both ONPEC and OPPECs should develop and implement appropriate strategies to increase the level of satisfaction by developing organizational characteristics found by this study to be important.

2. Because organizational characteristics are significantly correlated with satisfaction -- a criterion of organizational effectiveness -- organizational characteristics should be taken into account in planning structures and processes for educational administration at the provincial level in Thailand.

3. The findings of this study confirm for administrators in the Thailand Ministry of Education (MOE) that bureaucratic characteristics can be both positive and negative. The bureaucratic structure may result in conflicts between senior administrators, on the one hand, and section heads and supervisors, on the other. Hence, the policy on organizational characteristics set by MOE should be clear.

4. Since "the climate of supervisory work" is the most important characteristic of supervisory units in Thailand, as well as the best predictor of satisfaction, the emphasis should be on this characteristic -- autonomous climate of supervisory work -- in order to attain more effective operation of the supervisory units. Emphasis should also be placed on "procedural specification" -- more precisely specified procedures -- because this characteristic is the second most important and it is a good predictor of satisfaction as well.

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# APPENDIX A

## Functions of the Supervisory Unit at the Provincial Level in Thailand

## Functions of the Supervisory Unit at the Provincial Level in Thailand

The supervisory unit at the provincial level in Thailand consists of two sections: (a) the supervisory section, and (b) the planning and development section. The following are the functions of each of these two sections.

### A. Supervisory Section

1. Improving teaching-learning in the provincial primary schools.
2. Developing instruments for educational evaluation and managing the item bank for standardized testing.
3. Overseeing academic matters related to provincial primary schools.
4. Undertaking research projects concerning teaching-learning in primary education.
5. Co-operating with other organizations concerning activities in primary schools such as boy scouts, girl scouts, ethics, and culture.
6. Performing other activities as assigned by the Director.

### B. Planning and Development Section

1. Establishing operational policies and provincial primary education development plans.
2. Setting budget proposals and allocations for provincial primary education development.
3. Co-ordinating activities concerning staff development in the province.
4. Collecting data and tabulating educational statistics at the provincial level.

5. Making recommendations concerning school administration and improvement, the founding, consolidation and termination of schools under the Office of the Provincial Primary Education Commission (OPPEC).

6. Co-ordinating special projects assigned by the Office of the National Primary Education Commission (ONPEC) or OPPEC.

7. Performing the secretarial work for OPPEC.

8. Performing other duties as assigned by the Director.

## APPENDIX B

### Number of Schools and Supervisors Under OPPECs in Thailand

## Number of Schools and Supervisors Under OPPECs in Thailand

| | Name of Province | No.of Schools | No.of Supervisors | Location/ Geography |
|---|---|---|---|---|
| 1 | Bangkok | 36 | 11 | capital |
| 2 | Phuket [1] | 60*** | 10 | south |
| 3 | Ranong | 94* | 8 | south |
| 4 | Samut Songkhram [1] | 103* | 10 | central |
| 5 | Samut Sakhon | 112* | 11 | central |
| 6 | Trat [1] | 138 | 10 | central |
| 7 | Nonthaburi | 147 | 12 | central |
| 8 | Samut Prakarn | 147 | 12 | central |
| 9 | Sing Buri [1] | 149 | 10 | central |
| 10 | Ang Thong | 160 | 12 | central |
| 11 | Nakhon Nayok | 166 | 13 | central |
| 12 | Satun | 167 | 9 | south |
| 13 | Pathumthani [1] | 178 | 10 | central |
| 14 | Phang Nga [1] | 182 | 10 | south |
| 15 | Yala | 213** | 12 | south |
| 16 | Chainat | 228 | 10 | central |
| 17 | Rayong | 230 | 10 | central |
| 18 | Tak | 235 | 11 | north |
| 19 | Mukdahan [1] | 235 | 10 | north-east |
| 20 | Prachuap Kirikhan | 236 | 10 | central |
| 21 | Krabi | 236 | 8 | south |
| 22 | Chanthaburi | 240 | 12 | central |
| 23 | Phetchaburi | 249 | 11 | central |
| 24 | Nakhonpathom | 257** | 12 | central |
| 25 | Phatthalung [2] | 263 | 11 | south |
| 26 | Uthai Thani | 275 | 8 | central |
| 27 | Mae Hong Son | 280 | 9 | north |
| 28 | Phayao | 282 | 7 | north |
| 29 | Lamphun [2] | 291 | 12 | north |
| 30 | Chumphon [2] | 303 | 11 | south |
| 31 | Uttaradit [2] | 315 | 11 | north |
| 32 | Phrae | 326 | 10 | north |
| 33 | Chacheoeng Sao | 331** | 10 | central |
| 34 | Chonburi [2] | 333 | 12 | central |
| 35 | Trang | 335 | 12 | south |
| 36 | Pattani | 341 | 11 | south |
| 37 | Narathiwat | 358 | 9 | south |
| 38 | Ratchaburi | 358** | 11 | central |
| 39 | Saraburi | 359 | 12 | central |
| 40 | Sukhothai [2] | 372 | 12 | north |

continued

| Name of Province | | No.of Schools | No.of Supervisors | Location/ Geography |
|---|---|---|---|---|
| 41 | Yasothon [2] | 394 | 12 | north-east |
| 42 | Phichit | 403 | 11 | north |
| 43 | Nan | 418 | 11 | north |
| 44 | Ayutthaya [2] | 427 | 11 | central |
| 45 | Kamphaeng Phet | 436 | 11 | central |
| 46 | Kanchanaburi | 438 | 10 | central |
| 47 | Lopburi | 443** | 12 | central |
| 48 | Suphanburi [2] | 453 | 12 | central |
| 49 | Nakhon Phanom [2] | 455 | 11 | north-east |
| 50 | Loei [2] | 458 | 11 | north-east |
| 51 | Phitsanulok | 479** | 13 | north |
| 52 | Songkhla [2] | 483** | 11 | south |
| 53 | Nong Khai | 489 | 11 | north-east |
| 54 | Lampang | 549 | 12 | north |
| 55 | Kalasin | 576 | 11 | north-east |
| 56 | Surat Thani | 581 | 11 | south |
| 57 | Maha Sarakam | 585 | 12 | north-east |
| 58 | Prachin Buri | 593 | 12 | central |
| 59 | Phetchabun | 601 | 11 | north |
| 60 | Sakonnakhon | 614 | 12 | north-east |
| 61 | Chiang Rai | 661 | 12 | north |
| 62 | Nakhon Sawan | 675 | 12 | central |
| 63 | Chaiyaphum | 747 | 10 | north-east |
| 64 | Surin | 754 | 16 | north-east |
| 65 | Roi Et | 790 | 16 | north-east |
| 66 | Nakhon Srithammarat [3] | 803 | 15 | south |
| 67 | Buriram | 826 | 15 | north-east |
| 68 | Sisaket | 868 | 16 | north-east |
| 69 | Chiang Mai [3] | 1,012** | 17 | north |
| 70 | Khon Kaen [3] | 1,018 | 16 | north-east |
| 71 | Udon Thani | 1,172** | 18 | north-east |
| 72 | Ubon Ratchathani [3] | 1,330** | 16 | north-east |
| 73 | Nakhon Ratchasima [3] | 1,336** | 16 | north-east |

1 sample in small size OPPEC

2 sample in medium size OPPEC

3 sample in large size OPPEC

* one assistant director

** educational region

*** one assistant director and educational region

## APPENDIX C

**Letters to Respondents and Questionnaires**

# APPENDIX C.1
# LETTERS TO RESPONDENTS FOR THE PILOT STUDY

## To All Respondents

I am an educational officer in the Division of Educational Research, Department of Curriculum and Instruction Development, Ministry of Education. At the present time I am on leave of absence doing graduate work in the Department of Educational Administration at the University of Alberta, Canada. For my thesis I am investigating organizational characteristics of supervisory units at the provincial level.

For the purposes of this study, a procedure was used to select 2 Offices of the Provincial Primary Education Commission for the pilot test. Your office was one of those chosen. All supervisors, section heads in the supervisory unit, head supervisor, assistant directors, and director are asked to complete a questionnaire. I would be grateful for your co-operation in assisting me in my study. Please complete all sections of the enclosed questionnaire. All information given will be helpful for revising the questionnaire for my study.

I would be very grateful if you would find the time to complete the questionnaire. After completing it, please return the completed questionnaire to the collector. If you are not clear or do not understand any points or items, please give comments in the space provided following Section Three or write in the margins next to whatever item is not clear to you.

Thank you very much for your co-operation.

Sincerely yours,

(Miss Arunsri Anantrasirichai)

## APPENDIX C.2
## LETTER TO RESPONDENTS FOR THE SAMPLE

**To All Respondents**

I am an educational officer in the Division of Educational Research, Department of Curriculum and Instruction Development, Ministry of Education. At the present time I am on leave of absence doing graduate work in the Department of Educational Administration at the University of Alberta, Canada. For my thesis I am investigating organizational characteristics of supervisory units at the provincial level.

For the purposes of this study, a sampling procedure was used to select 25 Offices of the Provincial Primary Education Commission. Your Office was one of those chosen. All supervisors, section heads in the supervisory unit, head supervisor, deputy directors, and director are asked to complete a questionnaire. I would be grateful for your co-operation in assisting me in my study. Please complete all sections of the enclosed questionnaire. All information given will be held in the strictest confidence.

I would be very grateful if you would find the time to complete the questionnaire by January 10, 1986. After completing it, please place the completed questionnaire in the envelope provided and return it sealed to the staff member designated to receive the envelopes. That person will forward all envelopes back to the collector, Mrs. Mallika Nitayaphorn, Division of Educational Research, Department of Curriculum and Instruction Development, Ministry of Education.

Thank you very much for your co-operation.

Sincerely yours,

(Miss Arunsri Anantrasirichai)

# APPENDIX C.3
# QUESTIONNAIRE IN ENGLISH VERSION

The University of Alberta

Department of Educational Administration

## ORGANIZATIONAL SURVEY QUESTIONNAIRE

by

Arunsri Anantrasirichai

This questionnaire consists of three sections. They are:

Section One: Organizational Characteristics

Section Two: Satisfaction with the Job Situation

Section Three: Background Data

# ORGANIZATIONAL SURVEY QUESTIONNAIRE

## Section One: Organizational Characteristics

**Direction:**

This section consists of 62 statements which describe possible characteristics of supervisory units. You are asked to indicate how frequently each action or behavior occurs in your particular unit.

There are five possible answers for each statement:

**1 = Never**
**2 = Seldom**
**3 = Occasionally**
**4 = Often**
**5 = Always**

For each statement please circle the answer which comes closest to describing the supervisory unit with which you work.

| | Never | Seldom | Occasionally | Often | Always |
|---|---|---|---|---|---|
| 1. Supervisors are their own bosses. | 1 | 2 | 3 | 4 | 5 |
| 2. Supervisors can make their own decisions without checking with anyone else. | 1 | 2 | 3 | 4 | 5 |
| 3. Supervisors are required to initiate, in schools, extra-curriculum activities for which they have a limited background. | 1 | 2 | 3 | 4 | 5 |
| 4. Supervisors are expected to follow a manual of rules and regulations. | 1 | 2 | 3 | 4 | 5 |
| 5. Procedures are available for resolving difficult situations. | 1 | 2 | 3 | 4 | 5 |
| 6. Every person who calls the supervisory unit from the outside is treated the same. | 1 | 2 | 3 | 4 | 5 |
| 7. In order to get a promotion, a supervisor has to "know somebody." | 1 | 2 | 3 | 4 | 5 |
| 8. No one can get necessary supplies without permission from an immediate superior. | 1 | 2 | 3 | 4 | 5 |

| | | Never | Seldom | Occasionally | Often | Always |
|---|---|---|---|---|---|---|
| 9. | Specific tasks are assigned to particular supervisors. | 1 | 2 | 3 | 4 | 5 |
| 10. | Written orders from persons in higher positions are followed unquestioningly. | 1 | 2 | 3 | 4 | 5 |
| 11. | Supervisors are left to their own judgement as to how to handle various problems. | 1 | 2 | 3 | 4 | 5 |
| 12. | Supervisors who have contact with principals, teachers and other educational officers are clearly instructed in proper procedures for greeting and talking with them. | 1 | 2 | 3 | 4 | 5 |
| 13. | Supervisors possess above-average qualifications before they are placed in this supervisory unit. | 1 | 2 | 3 | 4 | 5 |
| 14. | Each supervisor is responsible to an administrator to whom the supervisor reports regularly. | 1 | 2 | 3 | 4 | 5 |
| 15. | Supervisors are assigned to do work for which they have limited experience or training. | 1 | 2 | 3 | 4 | 5 |
| 16. | Supervisors are checked for rule violations. | 1 | 2 | 3 | 4 | 5 |
| 17. | Supervisors are encouraged to use their own judgement. | 1 | 2 | 3 | 4 | 5 |
| 18. | Standard procedures are used for dealing with complaints about the conduct of supervisors on the job. | 1 | 2 | 3 | 4 | 5 |
| 19. | Promotions are based on how well supervisors do their jobs. | 1 | 2 | 3 | 4 | 5 |
| 20. | There can be little action until an administrator approves a decision. | 1 | 2 | 3 | 4 | 5 |
| 21. | Supervisors are expected to follow standard procedures in handling problems related to curriculum implementation. | 1 | 2 | 3 | 4 | 5 |
| 22. | Supervisors are expected not to leave their place of work without permission. | 1 | 2 | 3 | 4 | 5 |
| 23. | Similar procedures are to be followed by supervisors in most situations related to curriculum implementation. | 1 | 2 | 3 | 4 | 5 |

| | | Never | Seldom | Occasionally | Often | Always |
|---|---|---|---|---|---|---|
| 24. | In dealing with problems related to the performance of the supervisors,the head supervisor is encouraged to consider the individual offender, not the offense, in deciding on a corrective course of action. | 1 | 2 | 3 | 4 | 5 |
| 25. | Promotion is <u>not</u> based on personal preferences of the selectors, but on an objective evaluation of capabilities. | 1 | 2 | 3 | 4 | 5 |
| 26. | How things are done in the supervisory unit is left pretty much up to the individual supervisor. | 1 | 2 | 3 | 4 | 5 |
| 27. | Supervisors are responsible for more than one function. | 1 | 2 | 3 | 4 | 5 |
| 28. | The time for informal staff get-togethers during the work day in the supervisory unit is strictly regulated by the administration. | 1 | 2 | 3 | 4 | 5 |
| 29. | The development and demonstration of a wide variety of instructional methods and materials is encouraged in this supervisory unit. | 1 | 2 | 3 | 4 | 5 |
| 30. | The administration sponsors get-togethers of supervisors. | 1 | 2 | 3 | 4 | 5 |
| 31. | Supervisors are promoted simply because they have "pull". | 1 | 2 | 3 | 4 | 5 |
| 32. | Supervisors get their orders from the head supervisor. | 1 | 2 | 3 | 4 | 5 |
| 33. | Supervisors are expected to do classroom demonstrations of new teaching-learning kits for teachers. | 1 | 2 | 3 | 4 | 5 |
| 34. | Nothing is said if supervisors get to the office late or leave early. | 1 | 2 | 3 | 4 | 5 |
| 35. | Red tape is a problem in getting a job done in this organization. | 1 | 2 | 3 | 4 | 5 |
| 36. | The administrators in this organization stick pretty much to themselves. | 1 | 2 | 3 | 4 | 5 |
| 37. | Past supervisory experience plays a large part in the assignment of a supervisor. | 1 | 2 | 3 | 4 | 5 |

| | | Never | Seldom | Occasionally | Often | Always |
|---|---|---|---|---|---|---|
| 38. | Any decision a supervisor makes has to have the superordinate's approval. | 1 | 2 | 3 | 4 | 5 |
| 39. | Supervisors have to do a lot of paper work which could be done by the office staff. | 1 | 2 | 3 | 4 | 5 |
| 40. | The head supervisor makes his/her own rules for managing the supervisory unit. | 1 | 2 | 3 | 4 | 5 |
| 41. | Going through proper channels is stressed. | 1 | 2 | 3 | 4 | 5 |
| 42. | Supervisors are encouraged to become friendly with principals, teachers, and other educational officers who work outside the supervisory unit. | 1 | 2 | 3 | 4 | 5 |
| 43. | Supervisors are promoted for reasons other than demonstrating professional ability. | 1 | 2 | 3 | 4 | 5 |
| 44. | Supervisors who want to make their own decisions would quickly become discouraged in this organization. | 1 | 2 | 3 | 4 | 5 |
| 45. | Assignment of supervisory duties is made without regard for the supervisor's experience or training. | 1 | 2 | 3 | 4 | 5 |
| 46. | Supervisors feel as through they are being watched to see that they obey all the rules. | 1 | 2 | 3 | 4 | 5 |
| 47. | Supervisors are to follow strict operational procedures at all time. | 1 | 2 | 3 | 4 | 5 |
| 48. | Supervisors are expected to be courteous, but reserved, at all times in dealings with teachers and principals. | 1 | 2 | 3 | 4 | 5 |
| 49. | Supervisors are selected simply because they have attractive personalities. | 1 | 2 | 3 | 4 | 5 |
| 50. | Even small matters have to be referred to the administrator for a final answer. | 1 | 2 | 3 | 4 | 5 |
| 51. | Supervisors cannot expect to get assistance from the head supervisor and/or the section head in developing standardized tests. | 1 | 2 | 3 | 4 | 5 |
| 52. | Supervisors are expected to abide by the spirit of the rules of this organization rather than by the letter of the rules. | 1 | 2 | 3 | 4 | 5 |

| | | Never | Seldom | Occasionally | Often | Always |
|---|---|---|---|---|---|---|
| 53. | Whenever supervisors have a problem, they are supposed to go to their section head for an answer. | 1 | 2 | 3 | 4 | 5 |
| 54. | No matter how special a supervisor's problem appears to be, he/she is treated the same way as anyone else. | 1 | 2 | 3 | 4 | 5 |
| 55. | Promotions are based on how well you are liked. | 1 | 2 | 3 | 4 | 5 |
| 56. | Supervisors are allowed to do almost as they please in carrying out their tasks. | 1 | 2 | 3 | 4 | 5 |
| 57. | There is confusion and overlap in the job responsibilities of the Deputy Director and Head Supervisor. | 1 | 2 | 3 | 4 | 5 |
| 58. | Rules stating when supervisors arrive and depart from the building are strictly enforced. | 1 | 2 | 3 | 4 | 5 |
| 59. | There is only one way to do the job -- administration's way. | 1 | 2 | 3 | 4 | 5 |
| 60. | Supervisors are treated according to the rules of the organization, no matter how serious a problem they have. | 1 | 2 | 3 | 4 | 5 |
| 61. | There isn't much chance for a promotion unless you are "in" with the administration. | 1 | 2 | 3 | 4 | 5 |
| 62. | A supervisor has to ask the administrator before he/she does almost anything. | 1 | 2 | 3 | 4 | 5 |

**Section Two: Satisfaction with the Job Situation**

**Direction**

This section consists of items related to your job situation. For each statement please circle the answer which you feel comes closest to describing your level of satisfaction.

**1 = Highly Dissatisfied**
**2 = Moderately Dissatisfied**
**3 = Slightly Dissatisfied**
**4 = Slightly Satisfied**
**5 = Moderately Satisfied**
**6 = Highly Satisfied**

| HOW SATISFIED ARE YOU WITH | Highly Dissatisfied | Moderately Dissatisfied | Slightly Dissatisfied | Slightly Satisfied | Moderately Satisfied | Highly Satisfied |
|---|---|---|---|---|---|---|
| 1. your participation in the decision making process? | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. the treatment you receive when you have a problem? | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. the rules and regulations you have to follow? | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. the operating procedures which senior administrators have established for dealing with problems in curriculum implementation? | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. the way senior administrators make decisions? | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. the procedures to follow in dealing with recurring problems? | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. the methods used in determining promotion and salary increments? | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. the procedures used by the administrators in instructing subordinates in performing their job? | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. procedures the senior administrators use to assign responsibilities to supervisors? | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. the assignments for which you are responsible? | 1 | 2 | 3 | 4 | 5 | 6 |

| HOW SATISFIED ARE YOU WITH | Highly Dissatisfied | Moderately Dissatisfied | Slightly Dissatisfied | Slightly Satisfied | Moderately Satisfied | Highly Satisfied |
|---|---|---|---|---|---|---|
| 11. the procedures used by senior administrators in implementing rules and regulations? | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. the way tasks are subdivided and assigned? | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. On the whole, how satisfied are you with the way in which your organization functions? | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. On the whole, how satisfied are you with your job? | 1 | 2 | 3 | 4 | 5 | 6 |

**Section Three: Background Data**

**Direction:**

This section requests certain personal data. For each question or statement please circle your answer or fill in the blank provided.

1. Please indicate your sex.

    1. Male
    2. Female

2. What is your age?

    1. 25 years or under
    2. 26 - 30 years
    3. 31 - 35 years
    4. 36 - 40 years
    5. 41 - 45 years
    6. 46 - 50 years
    7. 51 - 55 years
    8. 56 - 60 years

3. Please indicate your present position.

   1. Director
   2. Assistant Director
   3. Head Supervisor
   4. Section Head in the supervisory section
   5. Section Head in the planning and development section
   6. Supervisor in the supervisory section
   7. Supervisor in the planning and development section
   8. Other: (Specify)_____

4. How many years have you held your present position (count six months as a full year)?

   _____ years

5. How many years have you worked in this Office of the Provincial Primary Education Commission (count six months as a full year)?

   _____ years

6. What position did you hold immediately prior to the present position?

   1. Director
   2. Assistant Director
   3. Head Supervisor
   4. Section Head in a supervisory unit
   5. Section Head but not in a supervisory unit
   6. Supervisor
   7. Principal
   8. Teacher
   9. Other: (Specify)_____

7. How many years did you hold your previous position (count six months as a full year)?

   _____ years

8. Prior to your present position, did you work under the Ministry of the Interior ?
   1. Yes
   2. No

9. If your answer is yes in question 8, please indicate the last position?

   1. Chief executive of provincial primary education or assistant
   2. Chief executive of district primary education or assistant
   3. Educational officer
   4. Supervisor
   5. Principal
   6. Teacher
   7. Other: (Specify)_____

If your answer is yes in question 8, please indicate the total number years you worked in the Ministry of the Interior?

_____ years

11. What is the highest degree you hold? Check one

1. B.A.
2. B.Sc.
3. B.Ed.
4. Two Bachelor's degrees
5. M.A.
6. M.Sc.
7. M.Ed.
8. Two Master's degrees
9. Ph.D. or Ed.D.
10. Other: (Specify)_____

# APPENDIX C.4

# QUESTIONNAIRE IN THAI VERSION

ภาควิชาการบริหารการศึกษา มหาวิทยาลัยอีสเทอร์น

แบบสอบถามเชิงสำรวจหน่วยงาน

โดย

นางสาวอรุณศรี ธนันตรศิริชัย

แบบสอบถามตอนนี้มี 3 ตอน ดังนี้

ตอนที่ 1 ลักษณะของหน่วยงาน 62 ข้อ

ตอนที่ 2 ความพึงพอใจในสภาพการทำงาน 14 ข้อ

ตอนที่ 3 ข้อมูลส่วนตัว 11 ข้อ

แบบสอบถามเชิงสำรวจหน่วยงาน

ตอนที่ 1 ลักษณะของหน่วยงาน

คำชี้แจง แบบสอบถามตอนที่ 1 นี้ มี 62 ข้อ ประกอบด้วยข้อความที่อธิบายลักษณะของหน่วยศึกษานิเทศก์จังหวัด โปรดระบุว่าแต่ละข้อมีการปฏิบัติหรือมีพฤติกรรมดังกล่าวเกิดขึ้นในหน่วยศึกษานิเทศก์จังหวัดของท่านมากน้อยเพียงใดใน 5 ระดับต่อไปนี้

1 = ไม่เลย
2 = นาน ๆ ครั้ง
3 = บางครั้ง
4 = บ่อยครั้ง
5 = ทุกครั้ง

โปรดวงรอบตัวเลขที่ท่านเห็นว่าเป็นความจริงมากที่สุดเกี่ยวกับหน่วยศึกษานิเทศก์จังหวัดของท่าน

| | ไม่เลย | นาน ๆ ครั้ง | บางครั้ง | บ่อยครั้ง | ทุกครั้ง |
|---|---|---|---|---|---|
| 1. ศึกษานิเทศก์ปฏิบัติงานได้อย่างมีอิสระ (เป็นนายของตัวเอง) | 1 | 2 | 3 | 4 | 5 |
| 2. ศึกษานิเทศก์สามารถตัดสินใจได้ด้วยตนเองโดยไม่ต้องตรวจสอบความเห็นจากใคร | 1 | 2 | 3 | 4 | 5 |
| 3. ศึกษานิเทศก์ได้รับมอบให้เป็นผู้ริเริ่มทำกิจกรรมพิเศษเกี่ยวกับหลักสูตรที่จัดในโรงเรียนทั้ง ๆ ที่มีคู่มือหลังไม่เพียงพอ | 1 | 2 | 3 | 4 | 5 |
| 4. หวังได้ว่าศึกษานิเทศก์จะปฏิบัติตามคู่มือว่าด้วยกฎและระเบียบของการปฏิบัติงาน | 1 | 2 | 3 | 4 | 5 |

| | ไม่เลย | นาน ๆ ครั้ง | บางครั้ง | บ่อยครั้ง | ทุกครั้ง |
|---|---|---|---|---|---|
| 5. หน่วยงานนี้มีวิธีแก้ไขสถานการณ์ที่เป็นปัญหา | 1 | 2 | 3 | 4 | 5 |
| 6. ทุกคนที่มาติดต่อกับหน่วยศึกษานิเทศก์นี้ได้รับการปฏิบัติเช่นเดียวกัน | 1 | 2 | 3 | 4 | 5 |
| 7. เพื่อให้ได้รับความก้าวหน้าในการทำงาน ศึกษานิเทศก์จำเป็นต้องมี "ผู้หนุนหลัง" | 1 | 2 | 3 | 4 | 5 |
| 8. ไม่มีผู้ใดสามารถเบิกรัสดุต่าง ๆ ที่จำเป็นได้ ถ้าไม่ได้รับอนุญาตจากผู้บังคับบัญชาเบื้องต้น | 1 | 2 | 3 | 4 | 5 |
| 9. มีการมอบหมายงานเฉพาะอย่างให้ศึกษานิเทศก์เป็นการเฉพาะบุคคล | 1 | 2 | 3 | 4 | 5 |
| 10. ศึกษานิเทศก์ต้องปฏิบัติตามคำสั่งที่เป็นลายลักษณ์อักษรจากผู้บังคับบัญชาอย่างไม่ต้องสงสัย | 1 | 2 | 3 | 4 | 5 |
| 11. หน่วยศึกษานิเทศก์นี้เปิดโอกาสให้ศึกษานิเทศก์พิจารณาเองว่าจะจัดการอย่างไรกับปัญหาต่าง ๆ ที่เกิดขึ้น | 1 | 2 | 3 | 4 | 5 |
| 12. ศึกษานิเทศก์ได้รับคำแนะนำอย่างชัดเจนในการติดต่อ ต้อนรับ ทูตสุขกับอาจารย์ใหญ่/ผู้อำนวยการโรงเรียน ครูและเจ้าหน้าที่ทางการศึกษาอื่น ๆ | 1 | 2 | 3 | 4 | 5 |
| 13. ผู้ที่จะได้รับเลือกเป็นศึกษานิเทศก์ในหน่วยงานนี้มีคุณสมบัติสูงกว่าระดับมาตรฐานที่กำหนดไว้ | 1 | 2 | 3 | 4 | 5 |
| 14. ศึกษานิเทศก์อยู่ในบังคับบัญชาของผู้บริหารที่คนเองเล่นอรายงานอยู่เป็นประจำ | 1 | 2 | 3 | 4 | 5 |
| 15. ศึกษานิเทศก์ได้รับมอบหมายให้ทำงานซึ่งตนเองมีประสบการณ์หรือได้รับการฝึกอบรมในงานนั้นไม่เพียงพอ | 1 | 2 | 3 | 4 | 5 |
| 16. มีการตรวจสอบศึกษานิเทศก์เกี่ยวกับการฝ่าฝืนกฎต่าง ๆ | 1 | 2 | 3 | 4 | 5 |
| 17. ศึกษานิเทศก์ถูกกระตุ้นให้รู้จักพิจารณาเรื่องต่าง ๆ ด้วยตนเอง | 1 | 2 | 3 | 4 | 5 |

| | ไม่เลย | นาน ๆ ครั้ง | บางครั้ง | บ่อยครั้ง | ทุกครั้ง |
|---|---|---|---|---|---|
| 18. มีวิธีการที่เป็นมาตรฐานสำหรับจัดการกับเรื่องที่มีผู้ร้องเรียนเกี่ยวกับการปฏิบัติตัวในการทำงานของศึกษานิเทศก์ | 1 | 2 | 3 | 4 | 5 |
| 19. การได้รับความก้าวหน้าในงานของศึกษานิเทศก์ขึ้นอยู่กับว่าศึกษานิเทศก์ทำงานได้ดีเพียงไร | 1 | 2 | 3 | 4 | 5 |
| 20. ศึกษานิเทศก์จะปฏิบัติงานได้น้อยมาก ถ้าผู้บริหารบังไม่ให้ความเห็นชอบ | 1 | 2 | 3 | 4 | 5 |
| 21. หวังได้ว่าศึกษานิเทศก์จะปฏิบัติตามวิธีการที่เป็นมาตรฐานในการแก้ปัญหาที่เกี่ยวกับการใช้หลักสูตร | 1 | 2 | 3 | 4 | 5 |
| 22. หวังได้ว่าศึกษานิเทศก์ไม่ออกจากสำนักงานก่อนได้รับอนุญาต | 1 | 2 | 3 | 4 | 5 |
| 23. ศึกษานิเทศก์มีวิธีปฏิบัติที่คล้ายคลึงกันในสภาพการณ์ส่วนใหญ่ที่เกี่ยวกับการใช้หลักสูตร | 1 | 2 | 3 | 4 | 5 |
| 24. เพื่อแก้ไขปัญหาการปฏิบัติงานของศึกษานิเทศก์ได้อย่างถูกต้อง หัวหน้าหน่วยศึกษานิเทศก์จะถูกกระตุ้นให้พิจารณาที่ตัวของศึกษานิเทศก์ที่เป็นเจ้าของปัญหา ไม่ใช่ตัดสินจากตัวปัญหาที่เกิดขึ้น | 1 | 2 | 3 | 4 | 5 |
| 25. การได้รับความก้าวหน้าในการทำงานไม่ขึ้นกับความชอบพอเป็นการส่วนตัวกับผู้พิจารณาความดีความชอบ แต่ขึ้นกับผลการประเมินความสามารถตามเกณฑ์ที่กำหนดไว้ | 1 | 2 | 3 | 4 | 5 |
| 26. งานต่าง ๆ ที่ทำในหน่วยศึกษานิเทศก์ ส่วนใหญ่มักปล่อยให้เป็นเรื่องของศึกษานิเทศก์แต่ละคน | 1 | 2 | 3 | 4 | 5 |
| 27. ศึกษานิเทศก์รับผิดชอบงานมากกว่าหนึ่งหน้าที่ | 1 | 2 | 3 | 4 | 5 |
| 28. ผู้บริหารวางระเบียบไว้อย่างเคร่งครัดในการใช้เวลาทำงานมารวมกลุ่มสังสรรค์กัน | 1 | 2 | 3 | 4 | 5 |

| | | ไม่เลย | นาน ๆ ครั้ง | บางครั้ง | บ่อยครั้ง | ทุกครั้ง |
|---|---|---|---|---|---|---|
| 29. | หน่วยศึกษานิเทศก์นี้คอยกระตุ้นให้มีการพัฒนาและดำริวิธีการสอนและสื่อการเรียนการสอนแบบต่าง ๆ | 1 | 2 | 3 | 4 | 5 |
| 30. | ผู้บริหารส่งเสริมให้มีการสังสรรค์กันในหมู่ศึกษานิเทศก์โดยรับเป็นเจ้าภาพให้ | 1 | 2 | 3 | 4 | 5 |
| 31. | ศึกษานิเทศก์ได้รับการส่งเสริมให้ก้าวหน้าได้ง่าย ๆ เพราะมีผู้ "สนับสนุน" | 1 | 2 | 3 | 4 | 5 |
| 32. | ศึกษานิเทศก์รับคำสั่งจากหัวหน้าหน่วยศึกษานิเทศก์ | 1 | 2 | 3 | 4 | 5 |
| 33. | หวังได้ว่าศึกษานิเทศก์จะสามารถดำริการใช้สื่อการเรียนการสอนแบบใหม่ ๆ ให้แก่ครูได้ | 1 | 2 | 3 | 4 | 5 |
| 34. | ไม่มีการว่ากล่าว ถ้าศึกษานิเทศก์มาทำงานสายหรือกลับเร็วก่อนเวลาเลิกงาน | 1 | 2 | 3 | 4 | 5 |
| 35. | การยึดถือระเบียบแบบแผนทางราชการมากเกินไป (red tape) ในหน่วยงานนี้ มักทำให้เกิดปัญหาต่อการทำงานให้แล้วเสร็จ | 1 | 2 | 3 | 4 | 5 |
| 36. | ผู้บริหารในหน่วยงานนี้ส่วนใหญ่ไม่ค่อยยุ่งเกี่ยวกับคนอื่น | 1 | 2 | 3 | 4 | 5 |
| 37. | ประสบการณ์เพิ่มเติมเกี่ยวกับการนิเทศของศึกษานิเทศก์มีส่วนอย่างมากในการมอบหมายงานให้แก่ศึกษานิเทศก์ | 1 | 2 | 3 | 4 | 5 |
| 38. | การตัดสินใจใด ๆ ก็ตามของศึกษานิเทศก์ต้องได้รับความเห็นชอบจากผู้บังคับบัญชา | 1 | 2 | 3 | 4 | 5 |
| 39. | ศึกษานิเทศก์ต้องทำงานธุรการเป็นส่วนใหญ่ ทั้ง ๆ ที่งานเหล่านี้เป็นงานที่เจ้าหน้าที่ธุรการทำได้ | 1 | 2 | 3 | 4 | 5 |
| 40. | หัวหน้าหน่วยศึกษานิเทศก์เป็นผู้กำหนดกฎระเบียบต่าง ๆ ที่ใช้ในหน่วยศึกษานิเทศก์ | 1 | 2 | 3 | 4 | 5 |

| | | ไม่เลย | นาน ๆ ครั้ง | บางครั้ง | บ่อยครั้ง | ทุกครั้ง |
|---|---|---|---|---|---|---|
| 41. | มีการเน้นให้มีการปฏิบัติงานให้ถูกต้องตามสายงาน | 1 | 2 | 3 | 4 | 5 |
| 42. | ศึกษานิเทศก์ถูกกระตุ้นให้แสดงความเป็นมิตรกับอาจารย์ใหญ่/ผู้ช่วยการโรงเรียน ครู และเจ้าหน้าที่ทางการศึกษาอื่น ๆ ที่ไม่ได้ทำงานในหน่วยศึกษานิเทศก์ | 1 | 2 | 3 | 4 | 5 |
| 43. | ศึกษานิเทศก์ได้รับการส่งเสริมให้ก้าวหน้าด้วยเหตุผลอื่นที่นอกเหนือไปจากการแสดงความสามารถในการทำงานตามหน้าที่ | 1 | 2 | 3 | 4 | 5 |
| 44. | ศึกษานิเทศก์ที่ต้องการตัดสินใจด้วยตนเองจะรู้สึกท้อใจที่จะทำงานในหน่วยงานนี้ | 1 | 2 | 3 | 4 | 5 |
| 45. | การมอบหมายหน้าที่การงานให้ศึกษานิเทศก์ปฏิบัติไม่ได้คำนึงถึงประสบการณ์หรือการได้รับการฝึกอบรมของศึกษานิเทศก์ | 1 | 2 | 3 | 4 | 5 |
| 46. | ศึกษานิเทศก์มีความรู้สึกว่าถูกจับตามองในเรื่องเกี่ยวกับการเชื่อฟังกฎของหน่วยงาน | 1 | 2 | 3 | 4 | 5 |
| 47. | ศึกษานิเทศก์ต้องปฏิบัติตามวิธีการปฏิบัติงานที่กำหนดไว้อย่างเคร่งครัดตลอดเวลา | 1 | 2 | 3 | 4 | 5 |
| 48. | หวังได้ว่าศึกษานิเทศก์จะดูภาพ อ่อนโยน แต่รักษาที่ทำไว้ทุกครั้งที่ติดต่อกับครูและอาจารย์ใหญ่/ผู้ช่วยการโรงเรียน | 1 | 2 | 3 | 4 | 5 |
| 49. | ศึกษานิเทศก์ได้รับคัดเลือก เพราะมีบุคลิกภาพภายนอกที่น่าประทับใจเท่านั้น | 1 | 2 | 3 | 4 | 5 |
| 50. | ถึงแม้จะเป็นเรื่องเล็ก ๆ น้อย ๆ ก็ต้องให้ผู้บริหารเป็นผู้ให้ข้อยุติ | 1 | 2 | 3 | 4 | 5 |
| 51. | ในการพิจารณาข้อทดสอบมาตรฐาน ศึกษานิเทศก์ไม่สามารถหวังได้ว่าจะได้รับความช่วยเหลือจากหัวหน้าหน่วยศึกษานิเทศก์และ/หรือหัวหน้าฝ่าย | 1 | 2 | 3 | 4 | 5 |

| | | ไม่เลย | นาน ๆ ครั้ง | บางครั้ง | บ่อยครั้ง | ทุกครั้ง |
|---|---|---|---|---|---|---|
| 52. | หรังได้ว่าศึกษานิเทศก์จะยึดถือเจตนาของผู้ออกกฎระเบียบของหน่วยงานมากกว่าตามกฎระเบียบที่เป็นลายลักษณ์อักษร | 1 | 2 | 3 | 4 | 5 |
| 53. | เมื่อใดก็ตามที่ศึกษานิเทศก์มีปัญหา ศึกษานิเทศก์ควรจะไปปรึกษาหัวหน้าฝ่ายของตนเอง | 1 | 2 | 3 | 4 | 5 |
| 54. | ไม่ว่าปัญหาที่เกิดขึ้นกับศึกษานิเทศก์มีลักษณะพิเศษอย่างไร ศึกษานิเทศก์จะได้รับการปฏิบัติเช่นเดียวกับที่ผู้อื่นได้รับ | 1 | 2 | 3 | 4 | 5 |
| 55. | การได้รับความก้าวหน้าในการทำงานขึ้นอยู่กับว่า มีคนช่วยท่านมากน้อยเพียงไร | 1 | 2 | 3 | 4 | 5 |
| 56. | ส่วนมากแล้วศึกษานิเทศก์ได้รับอนุญาตให้ทำงานที่ได้รับมอบหมายได้อย่างที่ต้องการ | 1 | 2 | 3 | 4 | 5 |
| 57. | มีความสับสนและซ้ำซ้อนกันในหน้าที่ความรับผิดชอบงานของผู้ช่วยผู้อำนวยการและหัวหน้าหน่วยศึกษานิเทศก์ | 1 | 2 | 3 | 4 | 5 |
| 58. | มีการนำกฎระเบียบเกี่ยวกับการมาทำงานและการเลิกงานมาใช้กับศึกษานิเทศก์อย่างเคร่งครัด | 1 | 2 | 3 | 4 | 5 |
| 59. | วิธีเดียวที่จะทำงานได้คือ ทำตามวิธีของผู้บริหาร | 1 | 2 | 3 | 4 | 5 |
| 60. | ศึกษานิเทศก์มักถูกตัดสินตามกฎระเบียบของหน่วยงานไม่ว่าปัญหาที่ประสบอยู่จะร้ายแรงเพียงใด | 1 | 2 | 3 | 4 | 5 |
| 61. | โอกาสที่จะได้รับความก้าวหน้าในการทำงานมีไม่มากนัก ยกเว้นแต่ว่าจะสามารถเข้าไปใกล้ชิดกับวงการบริหารได้ | 1 | 2 | 3 | 4 | 5 |
| 62. | ศึกษานิเทศก์ ต้องคอยถามผู้บริหารอยู่เสมอก่อนที่จะลงมือทำงานอะไรก็ตาม | 1 | 2 | 3 | 4 | 5 |

ตอนที่ 2 ความพึงพอใจในสภาพการทำงาน

คำชี้แจง แบบสอบถามตอนที่ 2 นี้ ประกอบด้วยข้อความเกี่ยวกับสภาพการทำงานของท่าน ในแต่ละข้อโปรดวงรอบตัวเลขที่ท่านคิดว่าใกล้เคียงมากที่สุดกับระดับความพึงพอใจของท่าน

1 = ไม่พอใจที่สุด
2 = ไม่พอใจมาก
3 = ไม่พอใจบ้าง
4 = พอใจบ้าง
5 = พอใจมาก
6 = พอใจมากที่สุด

| ท่านมีความพึงพอใจอย่างไรเกี่ยวกับเรื่องต่อไปนี้ | ไม่พอใจที่สุด | ไม่พอใจมาก | ไม่พอใจบ้าง | พอใจบ้าง | พอใจมาก | พอใจมากที่สุด |
|---|---|---|---|---|---|---|
| 1. การมีส่วนร่วมในกระบวนการตัดสินใจ | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. การปฏิบัติที่ท่านได้รับเมื่อท่านมีปัญหา | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. กฎและระเบียบต่าง ๆ ที่ท่านต้องปฏิบัติตาม | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. วิธีปฏิบัติงานที่ผู้บริหารระดับสูงกำหนดไว้สำหรับปัญหาที่เกิดจากการใช้หลักอาวุโส | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. วิธีที่ผู้บริหารระดับสูงตัดสินใจ | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. วิธีการที่ใช้กับปัญหาที่เกิดขึ้นบ่อย ๆ | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. วิธีที่จะใช้พิจารณาความก้าวหน้าในการงานและการเลื่อนขั้นเงินเดือน | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. วิธีการที่ผู้บริหารแนะนำผู้ใต้บังคับบัญชาเกี่ยวกับการปฏิบัติงานในหน้าที่ | 1 | 2 | 3 | 4 | 5 | 6 |

| | ไม่พอใจที่สุด | ไม่พอใจมาก | ไม่พอใจบ้าง | พอใจบ้าง | พอใจมาก | พอใจมากที่สุด |
|---|---|---|---|---|---|---|
| 9. วิธีการที่ผู้บริหารระดับสูงมอบหมายความรับผิดชอบให้ศึกษานิเทศก์ | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. งานที่ท่านได้รับมอบให้รับผิดชอบ | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. วิธีการที่ผู้บริหารระดับสูงนำกฎและระเบียบมาใช้ปฏิบัติจริง | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. วิธีแบ่งงานและมอบหมายงาน | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. ในภาพรวมทั้งหมด ท่านมีความพึงพอใจอย่างไรเกี่ยวกับการปฏิบัติหน้าที่ของหน่วยงานของท่าน | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. ในภาพรวมทั้งหมด ท่านมีความพึงพอใจอย่างไรกับงานของท่าน | 1 | 2 | 3 | 4 | 5 | 6 |

ตอนที่ 3 ข้อมูลส่วนตัว

คำชี้แจง แบบสอบถามตอนที่ 3 นี้ ต้องการทราบข้อมูลเกี่ยวกับตัวท่าน โปรดวงรอบคำตอบของท่านหรือเติมข้อความในที่ว่างที่เว้นไว้

1. เพศของท่าน
   1. ชาย
   2. หญิง
2. อายุของท่าน
   1. 25 ปี หรือน้อยกว่า
   2. 26 - 30 ปี
   3. 31 - 35 ปี
   4. 36 - 40 ปี
   5. 41 - 45 ปี
   6. 46 - 50 ปี
   7. 51 - 55 ปี
   8. 56 - 60 ปี

3. ตำแหน่งปัจจุบันของท่าน

1. ผู้อำนวยการ
2. ผู้ช่วยผู้อำนวยการ
3. หัวหน้าหน่วยศึกษานิเทศก์
4. หัวหน้าฝ่ายนิเทศการศึกษา
5. หัวหน้าฝ่ายแผนพัฒนา
6. ศึกษานิเทศก์ฝ่ายนิเทศการศึกษา
7. ศึกษานิเทศก์ฝ่ายแผนพัฒนา
8. อื่น ๆ (โปรดระบุ).....

4. จำนวนปีที่ท่านอยู่ในตำแหน่งปัจจุบัน

..... ปี ..... เดือน

5. จำนวนปีที่ท่านทำงานในสำนักงานคณะกรรมการการประถมศึกษาจังหวัดนี้

..... ปี ..... เดือน

6. ตำแหน่งเดิมก่อนที่ท่านจะมารักษาตำแหน่งปัจจุบันนี้

1. ผู้อำนวยการการประถมศึกษาจังหวัด
2. ผู้ช่วยผู้อำนวยการการประถมศึกษาจังหวัด
3. หัวหน้าหน่วยศึกษานิเทศก์จังหวัด
4. หัวหน้าฝ่ายในหน่วยศึกษานิเทศก์จังหวัด
5. หัวหน้าฝ่ายแต่ไม่ใช่ในหน่วยศึกษานิเทศก์จังหวัด
6. ศึกษานิเทศก์
7. ครูใหม่/ อาจารย์ใหม่/ ผู้อำนวยการโรงเรียน
8. ครู
9. อื่น ๆ (โปรดระบุ) .....

7. จำนวนปีที่ท่านทำงานในตำแหน่งที่ท่านตอบในข้อ 6

..... ปี ..... เดือน

8. ท่านเคยทำงานในสังกัดกระทรวงมหาดไทยมาก่อนหรือไม่

1. เคย
2. ไม่เคย

9. ถ้าท่านตอบว่า เคย ในข้อ 8 โปรดบอกตำแหน่งล่าสุดของท่าน

1. หัวหน้าส่วนหรือผู้ช่วยหัวหน้าส่วนการศึกษาจังหวัด
2. หัวหน้าส่วนหรือผู้ช่วยหัวหน้าส่วนการศึกษาอำเภอ
3. เจ้าหน้าที่การศึกษาจังหวัดหรืออำเภอ
4. ศึกษานิเทศก์
5. ครูใหญ่/อาจารย์ใหญ่โรงเรียน
6. ครู
7. อื่น ๆ (โปรดระบุ) .....

10. ถ้าท่านตอบว่า เคย ในข้อ 8 โปรดบอกจำนวนปีที่ทำงานในสังกัดกระทรวงมหาดไทย

..... ปี ..... เดือน

11. ปริญญาสูงสุดที่ท่านได้รับ (โปรดตอบเพียงข้อเดียว)

1. ปริญญาตรีทางศิลปศาสตร์หรืออักษรศาสตร์
2. ปริญญาตรีทางวิทยาศาสตร์
3. ปริญญาตรีทางการศึกษา
4. ปริญญาตรี 2 ปริญญา
5. ปริญญาโททางศิลปศาสตร์หรืออักษรศาสตร์
6. ปริญญาโททางวิทยาศาสตร์
7. ปริญญาโททางการศึกษา
8. ปริญญาโท 2 ปริญญา
9. ปริญญาเอก
10. อื่น ๆ (โปรดระบุ) .....

# APPENDIX D

## Additional Tables

**Table D.3.1**

**Distribution of Respondents in Small Size OPPECs by Sex, Age, and Level of Education**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| **Total** | **23** | **100.0** | **10** | **100.0** | **70** | **100.0** | **103** | **100.0** |
| Sex | | | | | | | | |
| male | 21 | 91.3 | 10 | 100.0 | 43 | 61.4 | 74 | 71.8 |
| female | 1 | 4.3 | - | - | 27 | 38.6 | 28 | 27.2 |
| no answer | 1 | 4.3 | - | - | - | - | 1 | 1.0 |
| Age | | | | | | | | |
| 26 - 30 | - | - | - | - | 4 | 5.7 | 4 | 3.9 |
| 31 - 35 | - | - | - | - | 13 | 18.6 | 13 | 12.6 |
| 36 - 40 | - | - | 3 | 30.0 | 26 | 37.1 | 29 | 28.2 |
| 41 - 45 | 9 | 39.1 | 3 | 30.0 | 15 | 21.4 | 27 | 26.2 |
| 46 - 50 | 6 | 26.1 | 1 | 10.0 | 7 | 10.0 | 14 | 13.6 |
| 51 - 55 | 5 | 21.7 | 1 | 10.0 | 5 | 7.1 | 11 | 10.7 |
| 56 - 60 | 3 | 13.0 | 2 | 20.0 | - | - | 5 | 4.9 |
| Level of Education | | | | | | | | |
| B.A. | 2 | 8.7 | - | - | 2 | 2.9 | 4 | 3.9 |
| B.Sc. | - | - | - | - | 3 | 4.3 | 3 | 2.9 |
| B.Ed. | 11 | 47.8 | 7 | 70.0 | 56 | 80.0 | 74 | 71.8 |
| Two Bachelor's degrees | - | - | - | - | 2 | 2.9 | 2 | 1.9 |
| M.A. | - | - | - | - | - | - | - | - |
| M.Sc. | - | - | - | - | 1 | 1.4 | 1 | 1.0 |
| M.Ed. | 7 | 30.0 | 2 | 20.0 | 6 | 8.6 | 15 | 14.6 |
| no answer | 3 | 13 | 1 | 10.0 | - | - | 4 | 2.9 |

**Table D.3.2**

**Distribution of Respondents in Medium Size OPPECs by Sex, Age, and Level of Education**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| **Total** | **38** | **100.0** | **20** | **100.0** | **118** | **100.0** | **176** | **100.0** |
| Sex | | | | | | | | |
| male | 37 | 97.4 | 16 | 80.0 | 88 | 74.6 | 141 | 80.1 |
| female | 1 | 2.6 | 4 | 20.0 | 30 | 25.4 | 35 | 19.9 |
| Age | | | | | | | | |
| 26 - 30 | - | - | - | - | 1 | 0.8 | 1 | 0.6 |
| 31 - 35 | - | - | - | - | 20 | 16.9 | 20 | 11.4 |
| 36 - 40 | 2 | 5.3 | - | - | 35 | 29.7 | 37 | 21.0 |
| 41 - 45 | 8 | 21.1 | 7 | 35.0 | 33 | 28.0 | 48 | 27.3 |
| 46 - 50 | 15 | 39.5 | 10 | 50.0 | 18 | 15.3 | 43 | 24.4 |
| 51 - 55 | 3 | 7.9 | 3 | 15.0 | 9 | 7.6 | 15 | 8.5 |
| 56 - 60 | 10 | 26.3 | - | - | 2 | 1.7 | 12 | 6.8 |
| Level of Education | | | | | | | | |
| B.A. | 3 | 7.9 | - | - | 3 | 2.5 | 6 | 3.4 |
| B.Sc. | - | - | - | - | 4 | 3.4 | 4 | 2.3 |
| B.Ed. | 23 | 60.5 | 15 | 75.0 | 92 | 78.0 | 130 | 73.9 |
| Two Bachelor's degrees | - | - | - | - | 3 | 2.5 | 3 | 1.7 |
| M.A. | - | - | - | - | 1 | 0.8 | 1 | 0.6 |
| M.Sc. | - | - | 1 | 5.0 | - | - | 1 | 0.6 |
| M.Ed. | 4 | 28.9 | 3 | 15.0 | 14 | 11.9 | 28 | 15.9 |
| no answer | 1 | 2.6 | 1 | 5.0 | 1 | 0.8 | 3 | 1.7 |

**Table D.3.3**

**Distribution of Respondents in Large Size OPPECs by Sex, Age, and Level of Education**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| **Total** | **15** | **100.0** | **6** | **100.0** | **65** | **100.0** | **86** | **100.0** |
| Sex | | | | | | | | |
| male | 14 | 93.3 | 6 | 100.0 | 50 | 76.9 | 70 | 81.4 |
| female | 1 | 6.7 | - | - | 15 | 23.1 | 16 | 18.6 |
| Age | | | | | | | | |
| 26 - 30 | - | - | - | - | - | - | - | - |
| 31 - 35 | - | - | - | - | 1 | 1.5 | 1 | 1.2 |
| 36 - 40 | - | - | - | - | 6 | 9.2 | 6 | 7.0 |
| 41 - 45 | 3 | 20.0 | 5 | 83.3 | 18 | 227.7 | 26 | 30.2 |
| 46 - 50 | 7 | 46.7 | - | - | 15 | 23.1 | 22 | 25.6 |
| 51 - 55 | 2 | 13.3 | - | - | 7 | 10.8 | 9 | 10.5 |
| 56 - 60 | 3 | 20.0 | 1 | 16.7 | 1 | 1.5 | 5 | 5.8 |
| Level of Education | | | | | | | | |
| B.A. | - | - | - | - | 3 | 4.6 | 3 | 3.5 |
| B.Sc. | - | - | - | - | 1 | 1.5 | 1 | 1.2 |
| B.Ed. | 9 | 60.0 | 3 | 50.0 | 45 | 69.2 | 57 | 66.3 |
| Two Bachelor's degrees | 2 | 13.3 | 1 | 16.6 | 1 | 1.5 | 2 | 2.3 |
| M.A. | - | - | 1 | 16.7 | 1 | 1.5 | 2 | 2.3 |
| M.Sc. | - | - | - | - | - | - | - | - |
| M.Ed. | 4 | 26.7 | 2 | 33.3 | 14 | 21.5 | 20 | 23.3 |

**Table D.3.4**

**Distribution of Respondents of OPPEC in Bangkok by Sex, Age, and Level of Education**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| **Total** | **2** | **100.0** | **2** | **100.0** | **8** | **100.0** | **12** | **100.0** |
| Sex | | | | | | | | |
| male | 2 | 100.0 | 1 | 50.00 | 3 | 37.5 | 6 | 50.0 |
| female | - | - | 1 | 50.0 | 5 | 62.5 | 6 | 50.0 |
| Age | | | | | | | | |
| 26 - 30 | - | - | - | - | - | - | - | - |
| 31 - 35 | - | - | - | - | - | - | - | - |
| 36 - 40 | - | - | 1 | 50.0 | 4 | 50.0 | 5 | 41.7 |
| 41 - 45 | 2 | 100.0 | - | - | - | - | 2 | 16.7 |
| 46 - 50 | - | - | 1 | 50.0 | 4 | 50.0 | 5 | 41.7 |
| 51 - 55 | - | - | - | - | - | - | - | - |
| 56 - 60 | - | - | - | - | - | - | - | - |
| Level of Education | | | | | | | | |
| B.A. | - | - | - | - | - | - | - | - |
| B.Sc. | - | - | - | - | - | - | - | - |
| B.Ed. | 1 | 50.0 | 1 | 50.0 | 3 | 37.5 | 5 | 41.7 |
| Two Bachelor's degrees | - | - | - | - | - | - | - | - |
| M.A. | - | - | - | - | 2 | 25 | 2 | 16.7 |
| M.Sc. | - | - | - | - | - | - | - | - |
| M.Ed. | 1 | 50.0 | 1 | 50.0 | 3 | 37.5 | 5 | 41.7 |

**Table D.3.5**

**Distribution of Respondents in Small Size OPPECs by Previous Position and Years of Experience**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| **Total** | **23** | **100.0** | **10** | **100.0** | **70** | **100.0** | **103** | **100.0** |
| Previous Position | | | | | | | | |
| director | 1 | 4.3 | - | - | - | - | 1 | 1.0 |
| assistant director | 6 | 26.1 | - | - | - | - | 6 | 5.8 |
| head supervisor | 3 | 13.0 | - | - | - | - | 3 | 2.9 |
| section head in supervisory unit | 5 | 21.7 | 2 | 20.0 | 2 | 2.9 | 9 | 8.7 |
| section head but not in supervisory unit | - | - | - | - | - | - | - | - |
| supervisor | 3 | 13.0 | 7 | 70.0 | 18 | 25.7 | 28 | 27.2 |
| principal | 1 | 4.3 | 1 | 10.0 | 5 | 7.1 | 7 | 6.8 |
| teacher | - | - | - | - | 37 | 52.9 | 37 | 35.9 |
| other | 4 | 17.4 | - | - | 6 | 8.6 | 10 | 9.7 |
| no answer | - | - | - | - | 2 | 2.9 | 2 | 1.9 |
| Years of Previous Experience | | | | | | | | |
| 1 or less | - | - | - | - | 9 | 12.9 | 9 | 8.7 |
| 2 - 5 | 8 | 34.8 | - | - | 19 | 27.0 | 27 | 26.3 |
| 6 - 10 | 7 | 30.4 | 6 | 60.0 | 18 | 25.7 | 31 | 30.2 |
| 11 - 15 | 1 | 4.3 | - | - | 11 | 15.9 | 12 | 11.5 |
| 16 - 20 | 3 | 13.0 | 2 | 20.0 | 4 | 5.7 | 9 | 8.6 |
| 21 - 25 | 1 | 4.3 | 1 | 10.0 | 2 | 2.8 | 4 | 4.0 |
| 26 or more | 1 | 4.3 | - | - | 1 | 1.4 | 2 | 2.0 |
| no answer | 2 | 8.7 | 1 | 10.0 | 6 | 8.6 | 9 | 8.7 |

**Table D.3.6**

**Distribution of Respondents in Medium Size OPPECs by Previous Position and Years of Experience**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| **Total** | **38** | **100.0** | **20** | **100.0** | **118** | **100.0** | **176** | **100.0** |
| Previous Position | | | | | | | | |
| director | 3 | 7.9 | - | - | - | - | 3 | 1.7 |
| assistant director | 7 | 18.4 | - | - | - | - | 7 | 4.0 |
| head supervisor | 2 | 5.3 | - | - | 1 | 0.8 | 3 | 1.7 |
| section head in supervisory unit | 4 | 10.5 | 4 | 20.0 | 5 | 4.2 | 13 | 7.4 |
| section head but not in supervisory unit | 1 | 2.6 | - | - | 2 | 1.7 | 3 | 1.7 |
| supervisor | 4 | 10.5 | 6 | 30.0 | 18 | 15.3 | 28 | 15.9 |
| principal | 4 | 10.5 | 2 | 10.0 | 14 | 11.9 | 20 | 11.4 |
| teacher | 1 | 2.6 | 6 | 30.0 | 61 | 51.7 | 68 | 38.6 |
| other | 12 | 31.6 | 2 | 10.0 | 17 | 14.4 | 31 | 17.6 |
| Years of Previous Experience | | | | | | | | |
| 1 or less | 2 | 5.3 | 1 | 5.0 | 8 | 6.8 | 11 | 6.2 |
| 2 - 5 | 10 | 26.3 | 6 | 30.0 | 48 | 40.7 | 64 | 36.4 |
| 6 - 10 | 15 | 39.3 | 10 | 50.0 | 26 | 22.0 | 51 | 29.0 |
| 11 - 15 | 3 | 7.8 | 1 | 5.0 | 18 | 15.3 | 22 | 12.5 |
| 16 - 20 | 6 | 15.8 | 1 | 5.0 | 12 | 10.2 | 19 | 10.8 |
| 21 - 25 | 2 | 5.2 | 1 | 5.0 | 5 | 4.2 | 8 | 4.5 |
| 26 or more | - | - | - | - | - | - | - | - |
| no answer | - | - | - | - | 1 | 0.8 | 1 | 0.6 |

Table D.3.7

**Distribution of Respondents in Large Size OPPECs by Previous Position and Years of Experience**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| **Total** | **15** | **100.0** | **6** | **100.0** | **65** | **100.0** | **86** | **100.0** |
| Previous Position | | | | | | | | |
| director | 2 | 13.3 | - | - | - | - | 2 | 2.3 |
| assistant director | 2 | 13.3 | - | - | - | - | 2 | 2.3 |
| head supervisor | 2 | 13.3 | - | - | - | - | 2 | 2.3 |
| section head in supervisory unit | 2 | 13.3 | 1 | 16.7 | 3 | 4.6 | 6 | 7.0 |
| section head but not in supervisory unit | 1 | 6.7 | 1 | 16.7 | - | - | 2 | 2.3 |
| supervisor | 1 | 6.7 | 2 | 33.3 | 11 | 16.9 | 14 | 16.3 |
| principal | 2 | 13.3 | - | - | 9 | 13.8 | 11 | 12.8 |
| teacher | - | - | 2 | 33.3 | 35 | 53.8 | 37 | 43.0 |
| other | 3 | 20.0 | - | - | 7 | 10.8 | 10 | 11.6 |
| Years of Previous Experience | | | | | | | | |
| 1 or less | 1 | 6.7 | - | - | 1 | 1.5 | 2 | 2.3 |
| 2 - 5 | 8 | 53.3 | 2 | 33.3 | 17 | 26.2 | 27 | 31.4 |
| 6 - 10 | 4 | 26.7 | 3 | 50.0 | 16 | 24.6 | 23 | 26.7 |
| 11 - 15 | 1 | 6.7 | - | - | 20 | 30.8 | 21 | 24.4 |
| 16 - 20 | - | - | 1 | 16.7 | 5 | 7.7 | 6 | 7.0 |
| 21 - 25 | - | - | - | - | 4 | 6.2 | 4 | 4.7 |
| 26 or more | - | - | - | - | 1 | 1.5 | 1 | 1.2 |
| no answer | 1 | 6.7 | - | - | 1 | 1.5 | 2 | 2.3 |

Table D.3.8

Distribution of Respondents of OPPEC in Bangkok by Previous Position and Years of Experience

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| **Total** | **2** | **100.0** | **2** | **100.0** | **8** | **100.0** | **12** | **100.0** |
| Previous Position | | | | | | | | |
| director | 1 | 50.0 | - | - | - | - | 1 | 8.3 |
| assistant director | - | - | - | - | - | - | - | - |
| head supervisor | - | - | - | - | - | - | - | - |
| section head in supervisory unit | 1 | 50.0 | - | - | - | - | 1 | 8.3 |
| section head but not in supervisory unit | - | - | - | - | 1 | 12.5 | 1 | 8.3 |
| supervisor | - | - | - | - | - | - | - | - |
| principal | - | - | - | - | 1 | 12.5 | 1 | 8.3 |
| teacher | - | - | 2 | 100.0 | 6 | 75.0 | 8 | 66.7 |
| Years of Previous Experience | | | | | | | | |
| 1 or less | - | - | - | - | - | - | - | - |
| 2 - 5 | 1 | 50.0 | - | - | - | - | 1 | 8.3 |
| 6 - 10 | | | | | | | | |
| 11 - 15 | - | - | 1 | 50.0 | 1 | 12.5 | 2 | 16.6 |
| 16 - 20 | 1 | 50.0 | 1 | 50.0 | 3 | 37.5 | 5 | 41.6 |
| 21 - 25 | - | - | - | - | 1 | 12.5 | 1 | 8.3 |
| 26 or more | - | - | - | - | 1 | 12.5 | 1 | 8.3 |
| no answer | - | - | - | - | 1 | 12.5 | 1 | 8.3 |

**Table D.3.9**
**Distribution of Respondents in Small Size OPPECs by Work Experience, Position, and Years of Experience in the MOI**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| Work Experience | | | | | | | | |
| yes | 12 | 52.2 | 2 | 20.0 | 44 | 62.9 | 58 | 56.3 |
| no | 11 | 47.8 | 8 | 80.0 | 26 | 37.1 | 45 | 43.7 |
| Total | 23 | 100.0 | 10 | 100.0 | 70 | 100.0 | 103 | 100.0 |
| Position | | | | | | | | |
| chief executive of province or assistant | 4 | 33.3 | - | - | 1 | 2.3 | 5 | 8.6 |
| chief executive of district or assistant | 3 | 25.0 | - | - | - | - | 3 | 5.2 |
| educational officer | 1 | 8.3 | - | - | - | - | 1 | 1.8 |
| supervisor | - | - | - | - | 2 | 4.5 | 2 | 3.5 |
| principal | 1 | 8.3 | 1 | 50.0 | 3 | 6.8 | 5 | 8.6 |
| teacher | 1 | 8.3 | - | - | 34 | 77.3 | 35 | 60.3 |
| other | 2 | 16.6 | 1 | 50.0 | 4 | 9.1 | 7 | 12.1 |
| Total | 12 | 100.0 | 2 | 100.0 | 44 | 100.0 | 58 | 100.0 |
| Years of Previous Experience | | | | | | | | |
| 1 or less | - | - | - | - | - | - | - | - |
| 2 - 5 | 3 | 25.0 | - | - | 11 | 25.0 | 14 | 24.1 |
| 6 - 10 | 2 | 16.7 | - | - | 16 | 36.4 | 18 | 31.0 |
| 11 - 15 | 6 | 50.0 | 1 | 50.0 | 11 | 25.0 | 19 | 32.8 |
| 16 - 20 | 1 | 8.3 | 1 | 50.0 | - | - | 1 | 1.0 |
| 21 - 25 | - | - | - | - | - | - | - | - |
| 26 or more | - | - | - | - | - | - | - | - |
| no answer | - | - | - | - | 6 | 13.6 | 6 | 10.3 |
| Total | 12 | 100.0 | 2 | 100.0 | 44 | 100.0 | 58 | 100.0 |

**Table D.3.10**
**Distribution of Respondents in Medium Size OPPECs by Work Experience, Position, and Years of Experience in the MOI**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| Work Experience | | | | | | | | |
| yes | 23 | 60.5 | 8 | 40.0 | 63 | 53.4 | 94 | 53.4 |
| no | 15 | 39.5 | 12 | 60.0 | 55 | 46.6 | 82 | 46.6 |
| Total | 38 | 100.0 | 20 | 100.0 | 118 | 100.0 | 176 | 100.0 |
| Position | | | | | | | | |
| chief executive of province or assistant | 10 | 43.5 | - | - | 2 | 3.2 | 12 | 12.8 |
| chief executive of district or assistant | 3 | 13.0 | - | - | 1 | 1.6 | 4 | 4.3 |
| educational officer | 1 | 4.3 | 1 | 12.5 | 4 | 6.3 | 6 | 6.4 |
| supervisor | 1 | 4.3 | 2 | 25.0 | 2 | 3.2 | 5 | 5.3 |
| principal | 6 | 26.1 | 2 | 25.0 | 11 | 17.5 | 19 | 20.2 |
| teacher | 1 | 4.3 | 1 | 12.5 | 39 | 61.9 | 41 | 43.6 |
| other | 1 | 4.3 | 2 | 25.0 | 4 | 6.3 | 7 | 7.5 |
| Total | 23 | 100.0 | 8 | 100.0 | 63 | 100.0 | 94 | 100.0 |
| Years of Previous Experience | | | | | | | | |
| 1 or less | - | - | - | - | 1 | 1.6 | 1 | 0.6 |
| 2 - 5 | 1 | 4.3 | 3 | 37.5 | 15 | 23.8 | 19 | 20.7 |
| 6 - 10 | 11 | 47.8 | 3 | 37.5 | 22 | 34.9 | 36 | 38.3 |
| 11 - 15 | 9 | 39.1 | 2 | 25.0 | 22 | 34.9 | 33 | 35.1 |
| 16 - 20 | - | - | - | - | 3 | 4.8 | 3 | 3.2 |
| 21 - 25 | 2 | 8.7 | - | - | - | - | 2 | 2.1 |
| 26 or more | - | - | - | - | - | - | - | - |
| Total | 23 | 100.0 | 8 | 100.0 | 63 | 100.0 | 94 | 100.0 |

**Table D.3.11**
**Distribution of Respondents in Large Size OPPECs by Work Experience, Position, and Years of Experience in the MOI**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| Work Experience | | | | | | | | |
| yes | 13 | 86.7 | 1 | 16.7 | 35 | 53.8 | 49 | 57.0 |
| no | 2 | 13.3 | 5 | 83.3 | 30 | 46.2 | 37 | 43.0 |
| Total | 15 | 100.0 | 6 | 100.0 | 65 | 100.0 | 86 | 100.0 |
| Position | | | | | | | | |
| chief executive of province or assistant | 3 | 23.1 | - | - | - | - | 3 | 6.1 |
| chief executive of district or assistant | 2 | 15.4 | - | - | 1 | 2.9 | 3 | 6.1 |
| educational officer | 1 | 7.7 | - | - | 5 | 14.3 | 7 | 14.3 |
| supervisor | 2 | 15.4 | - | - | 1 | 2.9 | 3 | 6.1 |
| principal | 3 | 23.1 | 1 | 100.0 | 5 | 14.3 | 9 | 18.4 |
| teacher | - | - | - | - | 1 | 2.9 | 2 | 4.1 |
| other | 2 | 15.4 | - | - | 1 | 2.9 | 2 | 4.1 |
| Total | 13 | 100.0 | 1 | 100.0 | 35 | 100.0 | 49 | 100.0 |
| Years of Previous Experience | | | | | | | | |
| 1 or less | - | - | - | - | 1 | 2.9 | 1 | 2.0 |
| 2 - 5 | 3 | 23.1 | - | - | 6 | 17.1 | 9 | 18.4 |
| 6 - 10 | 2 | 15.4 | - | - | 11 | 31.4 | 13 | 26.5 |
| 11 - 15 | 8 | 61.5 | 1 | 100.0 | 15 | 42.9 | 24 | 48.9 |
| 16 - 20 | - | - | - | - | 1 | 2.9 | 1 | 2.0 |
| 21 - 25 | - | - | - | - | - | - | - | - |
| 26 or more | - | - | - | - | - | - | - | - |
| no answer | - | - | - | - | 1 | 2.9 | 1 | 2.0 |
| Total | 13 | 100.0 | 1 | 100.0 | 35 | 100.0 | 49 | 100.0 |

**Table D.3.12**
**Distribution of Respondents of OPPEC in Bangkok by Work Experience, Position, and Years of Experience in the MOI**

| Category | Senior Admin. f | Senior Admin. % | Section Head f | Section Head % | Supervisor f | Supervisor % | Total f | Total % |
|---|---|---|---|---|---|---|---|---|
| Work Experience | | | | | | | | |
| yes | 1 | 50.0 | - | - | 1 | 12.5 | 2 | 16.7 |
| no | 1 | 50.0 | 2 | 100.0 | 7 | 87.5 | 10 | 83.3 |
| Total | 2 | 100.0 | 2 | 100.0 | 8 | 100.0 | 12 | 100.0 |
| Position | | | | | | | | |
| chief executive of province or assistant | 1 | 100.0 | - | - | - | - | 1 | 50.0 |
| chief executive of district or assistant | - | - | - | - | - | - | - | - |
| educational officer | - | - | - | - | - | - | - | - |
| supervisor | - | - | - | - | - | - | - | - |
| principal | - | - | - | - | 1 | 100.0 | 1 | 50.0 |
| teacher | - | - | - | - | - | - | - | - |
| Total | 1 | 100.0 | - | - | 1 | 100.0 | 2 | 100.0 |
| Years of Previous Experience | | | | | | | | |
| 1 or less | - | - | - | - | - | - | - | - |
| 2 - 5 | - | - | - | - | - | - | - | - |
| 6 - 10 | - | - | - | - | - | - | - | - |
| 11 - 15 | - | - | - | - | 1 | 100.0 | 1 | 50.0 |
| 16 - 20 | 1 | 100.0 | - | - | - | - | 1 | 50.0 |
| 21 - 25 | - | - | - | - | - | - | - | - |
| 26 or more | - | - | - | - | - | - | - | - |
| Total | 1 | 100.0 | - | - | 1 | 100.0 | 2 | 100.0 |

**Table D.4.1**

**Oblimin Factor Solution for 62 Items in Organizational Characteristics Using Seven Factors**

| Organizational Characteristics | Factors and Factor Loadings | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. Supervisors are left to their own judgement as to how to handle various problems. | **-.36** | .03 | .24 | .01 | .02 | .20 | .22 |
| *12. Supervisors who have contact with principals, teachers, and other educational officers are clearly instructed in proper procedures for greeting and talking with them. | **-.37** | .10 | .00 | -.27 | -.07 | .22 | .02 |
| 35. Red tape is a problem in getting a job done in this organization. | **.41** | .05 | .04 | -.16 | -.24 | .11 | .22 |
| 44. Supervisors who want to make their own decisions would quickly become discouraged in this organization. | **.42** | -.19 | .00 | .02 | -.15 | .17 | .19 |
| 45. Assignment of supervisory duties is made without regard for the supervisor's experience or training. | **.55** | -.23 | .01 | .07 | -.01 | .17 | .02 |
| 46. Supervisors feel as though they are being watched to see that they obey all the rules. | **.48** | -.08 | .12 | -.12 | -.11 | -.16 | .28 |
| 51. Supervisors cannot expect to get assistance from the head supervisor and/or the section head in developing standardized tests. | **.54** | -.23 | .30 | .06 | -.12 | -.12 | .02 |
| 56. Supervisors are allowed to do almost as they please in carrying out their tasks. | **-.54** | .17 | .08 | .03 | -.23 | .07 | .01 |

continued

* discarded item

**Table D.4.1 (continued)**

| Organizational Characteristics | Factors and Factor Loadings 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 57. There is confusion and overlap in the job responsibilities of the Assistant Director and Head Supervisor. | **.66** | .20 | -.05 | -.03 | -.07 | .20 | .01 |
| 4. Supervisors are expected to follow a manual of rules and regulations. | -.14 | **.49** | .08 | .11 | -.05 | -.12 | .01 |
| 5. Procedures are available for resolving difficult situations. | -.17 | **.54** | -.02 | -.13 | -.15 | -.03 | .05 |
| 6. Every person who calls the supervisory unit from the outside is treated the same. | -.27 | **.42** | -.12 | -.13 | .13 | .09 | .12 |
| *13. Supervisors possess above-average qualifications before they are placed in this supervisory unit. | .04 | **.47** | .04 | -.29 | -.11 | .20 | .20 |
| 21. Supervisors are expected to follow standard procedures in handling problems related to curriculum implementation. | -.14 | **.57** | .12 | .11 | .07 | .06 | .15 |
| 23. Similar procedures are to be followed by supervisors in most situations related to curriculum implementation. | .01 | **.52** | .20 | .24 | .12 | .05 | .03 |
| 29. The development and demonstration of a wide variety of instructional methods and materials is encouraged in this supervisory unit. | .01 | **.67** | .01 | -.24 | -.04 | -.01 | .01 |

* discarded item

continued

Table D.4.1 (continued)

| Organizational Characteristics | Factors and Factor Loadings 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 33. Supervisors are expected to do classroom demonstrations of new teaching-learning kits for teachers. | .07 | **.69** | .03 | -.06 | -.01 | -.05 | .01 |
| *37. Past supervisory experience plays a large part in the assignment of a supervisor. | -.12 | **.42** | .04 | .17 | -.23 | -.05 | .15 |
| 41. Going through proper channels is stressed. | -.07 | .20 | **.53** | .10 | -.04 | -.14 | .10 |
| 42. Supervisors are encouraged to become friendly with principals, teachers, and other educational officers who work outside the supervisory unit. | .21 | .31 | **.48** | .07 | .13 | .04 | .10 |
| 43. Supervisors are promoted for reasons other than demonstrating professional ability. | -.02 | -.14 | **.44** | -.11 | -.25 | .11 | .08 |
| 16. Supervisors are checked for rule violations. | .18 | .05 | .09 | **-.61** | -.02 | .04 | .25 |
| 18. Standard procedures are used for dealing with complaints about the conduct of supervisors on the job. | -.06 | .17 | .23 | **-.49** | .28 | -.11 | .21 |
| 30. The administration sponsors get-togethers of supervisors. | -.10 | .10 | .31 | **-.45** | -.11 | -.07 | .10 |
| 48. Supervisors are expected to be courteous, but reserved, at all times in dealings with teachers and principals. | -.00 | .13 | .21 | **.38** | -.09 | .14 | .20 |
| 32. Supervisors get their orders from the head supervisor. | -.26 | .06 | .03 | -.01 | **-.50** | .19 | .03 |

continued

* discarded item

**Table D.4.1 (continued)**

| Organizational Characteristics | Factors and Factor Loadings 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 34. Nothing is said if supervisors get to the office late or leave early. | .07 | -.02 | .09 | .10 | **-.48** | -.33 | .05 |
| 36. The administrators in this organization stick pretty much to themselves. | .21 | .07 | .02 | .07 | **-.35** | .04 | .09 |
| 40. The head supervisor makes his/her own rules for managing the supervisory unit. | -.06 | .05 | -.07 | -.12 | **-.60** | -.05 | .11 |
| 7. In order to get a promotion, a supervisor has to "know somebody." | .09 | .02 | -.03 | .12 | -.32 | **.47** | .00 |
| 9. Specific tasks are assigned to particular supervisors. | -.14 | -.01 | .03 | -.02 | -.01 | **.49** | .01 |
| 15. Supervisors are assigned to do work for which they have limited experience or training. | .11 | -.24 | -.03 | -.24 | .10 | **.44** | .08 |
| 26. How things are done in the supervisory unit is left pretty much up to the individual supervisor. | .19 | -.25 | .25 | .24 | .21 | **.35** | .01 |
| 27. Supervisors are responsible for more than one function. | .20 | .18 | .07 | .34 | .14 | **.44** | .04 |
| 55. Promotions are based on how well you are liked. | .14 | -.11 | -.12 | .04 | -.27 | **.39** | .09 |
| 61. There isn't much chance for a promotion unless you are "in" with the administration. | .29 | -.12 | -.16 | .03 | -.11 | **.45** | .27 |

continued

Table D.4.1 (continued)

| Organizational Characteristics | Factors and Factor Loadings 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. Supervisors are their own bosses. | -.23 | -.01 | .33 | .06 | -.12 | .06 | .43 |
| 8. No one can get necessary supplies without permission from an immediate superior. | -.04 | -.11 | .07 | -.14 | .07 | .25 | .40 |
| 10. Written orders from persons in higher positions are followed unquestioningly. | -.06 | -.08 | .08 | .17 | .23 | .12 | .46 |
| 14. Each supervisor is responsible to an administrator to whom the supervisor reports regularly. | -.29 | .13 | -.03 | .21 | -.00 | .22 | .41 |
| 20. There can be little action until an administrator approves a decision. | .04 | .05 | .02 | .05 | .03 | .13 | .49 |
| 38. Any decision a supervisor makes has to have the superordinate's approval. | -.08 | .15 | -.03 | .14 | -.06 | .14 | .54 |
| 47. Supervisors are to follow strict operational procedures at all time. | .16 | .14 | .19 | -.07 | .02 | .08 | .49 |
| 50. Even small matters have to be referred to the administrator for a final answer. | .32 | -.20 | .05 | -.01 | -.17 | .01 | .46 |
| 54. No matter how special a supervisor's problem appears to be, he/she is treated the same way as anyone else. | -.14 | .04 | -.03 | -.08 | .04 | -.16 | .56 |
| 58. Rules stating when supervisors arrive and depart from the building are strictly enforced. | .07 | -.01 | .06 | -.23 | -.08 | -.05 | .47 |

continued

**Table D.4.1 (continued)**

| Organizational Characteristics | Factors and Factor Loadings 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 59. There is only one way to do the job -- administration's way. | .19 | -.02 | -.13 | .05 | -.21 | .18 | **.51** |
| 60. Supervisors are treated according to the rules of the organization, no matter how serious a problem they have. | .12 | -.14 | .04 | -.03 | -.08 | -.00 | **.60** |
| 62. A supervisor has to ask the administrator before he/she does almost anything. | .34 | -.08 | -.16 | .08 | -.07 | .10 | **.44** |
| 2. Supervisors can make their own decisions without checking with anyone else. | -.10 | -.04 | **.38** | -.06 | -.06 | .02 | **.46** |
| 17. Supervisors are encouraged to use their own judgement. | .11 | **.41** | **.32** | -.28 | .01 | -.07 | .22 |
| 19. Promotions are based on how well supervisors do their jobs. | **-.36** | .18 | **.42** | -.06 | .15 | -.07 | .04 |
| 28. The time for informal staff get-togethers during the work day in the supervisory unit is strictly regulated by the administration. | -.08 | .15 | -.05 | **-.36** | .10 | .08 | **.38** |
| 39. Supervisors have to do a lot of paper work which could be done by the office staff. | **.28** | .03 | .06 | .14 | .10 | **.36** | .24 |
| 53. Whenever supervisors have a problem, they are supposed to go to their section head for an answer. | **-.37** | .09 | .22 | .08 | -.07 | -.08 | **-.40** |

continued

Table D.4.1 (continued)

| Organizational Characteristics | Factors and Factor Loadings 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 3. Supervisors are required to initiate, in schools, extra-curriculum, activities for which they have a limited background. | .00 | -.26 | .31 | -.18 | .01 | .22 | .06 |
| 22. Supervisors are expected not to leave their place of work without permission. | .12 | .33 | -.11 | -.14 | .08 | -.03 | .28 |
| 24. In dealing with problems related to the performance of the supervisors, the head supervisor is encouraged to consider the individual offender, not the offense, in deciding on a corrective course of action. | .05 | .03 | .27 | -.12 | -.07 | .04 | .17 |
| 25. Promotion is not based on personal preferences of the selectors, but on an objective evaluation of capabilities. | -.21 | .27 | .32 | -.11 | .16 | -.25 | .12 |
| 31. Supervisors are promoted simply because they have "pull". | -.09 | -.08 | .28 | -.28 | -.30 | .12 | .24 |
| 49. Supervisors are selected simply because they have attractive personalities. | .11 | -.29 | .17 | .00 | -.30 | -.03 | .09 |
| 52. Supervisors are expected to abide by the spirit of the rules of this organization rather than by the letter of the rules. | .05 | -.06 | .22 | .03 | -.09 | -.18 | .32 |

**Table D.7.1**

**Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: Total Sample of Respondents from OPPECs**

**(N = 377)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .59 | .35 | |
| Procedural Specification | .62 | .39 | .04 |
| Bases for Work Assignment and Promotion | .63 | .40 | .01 |

**Table D.7.2**

**Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: Total Sample of Respondents from OPPECs**

**(N = 377)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .50 | .25 | |
| Procedural Specification | .53 | .28 | .03 |
| Bases for Work Assignment and Promotion | .54 | .29 | .01 |

**Table D.7.3**

**Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: Total Sample of Respondents from OPPECs**

**(N = 377)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .52 | .27 | |
| Procedural Specification | .56 | .31 | .04 |
| Bases for Work Assignment and Promotion | .57 | .32 | .01 |

**Table D.7.4**

**Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: Total Sample of Respondents from OPPECs**

**(N = 377)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .46 | .21 | |
| Procedural Specification | .49 | .24 | .03 |

**Table D.7.5**

**Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: Respondents Working in Small Size OPPECs**

(N = 103)

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .69 | .47 | |
| Bases for Work Assignment and Promotion | .71 | .50 | .03 |

**Table D.7.6**

**Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: Respondents Working in Small Size OPPECs**

(N = 103)

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .51 | .26 | |
| Procedural Specification | .55 | .31 | .05 |

**Table D.7.7**

**Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: Respondents Working in Small Size OPPECs**

**(N = 103)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .68 | .47 | |
| Procedural Specification | .71 | .51 | .04 |

**Table D.7.8**

**Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: Respondents Working in Small Size OPPECs**

**(N = 103)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .54 | .29 | |
| Procedural Specification | .59 | .34 | .05 |

**Table D.7.9**

**Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: Respondents Working in Medium Size OPPECs**

**(N = 176)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .61 | .37 | |
| Bases for Work Assignment and Promotion | .62 | .38 | .01 |

**Table D.7.10**

**Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: Respondents Working in Medium Size OPPECs**

**(N = 176)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .47 | .23 | |
| Bases for Work Assignment and Promotion | .50 | .25 | .02 |

**Table D.7.11**

**Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: Respondents Working in Medium Size OPPECs**

**(N = 176)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .41 | .17 | |
| Administrative Authority | .43 | .19 | .02 |

**Table D.7.12**

**Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: Respondents Working in Medium Size OPPECs**

**(N = 176)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .41 | .17 | |

**Table D.7.13**

**Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: Respondents Working in Large Size OPPECs**

**(N = 86)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| Bases for Work Assignment and Promotion | .52 | .27 | |
| Procedural Specification | .58 | .34 | .07 |
| Hierarchy of Authority | .64 | .41 | .07 |

**Table D.7.14**

**Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: Respondents Working in Large Size OPPECs**

**(N = 86)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .55 | .31 | |
| Bases for Work Assignment and Promotion | .59 | .35 | .04 |

**Table D.7.15**

**Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: Respondents Working in Large Size OPPECs**

**(N = 86)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| Bases for Work Assignment and Promotion | .53 | .28 | |
| Procedural Specification | .58 | .35 | .07 |
| The Climate of Supervisory Work | .62 | .39 | .04 |

**Table D.7.16**

**Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: Respondents Working in Large Size OPPECs**

**(N = 86)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .49 | .24 | |
| Procedural Specification | .56 | .31 | .07 |

**Table D.7.17**

**Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: Respondents Working in Bangkok Supervisory Unit (N = 12)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| Procedural Specification | .65 | .43 | |

**Table D.7.18**

**Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: Respondents Working in Bangkok Supervisory Unit (N = 12)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .69 | .47 | |

**Table D.7.19**

**Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: The Senior Administrator Sample**

**(N = 78)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .41 | .16 | |

**Table D.7.20**

**Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: The Senior Administrator Sample**

**(N = 78)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .39 | .15 | |

**Table D.7.21**

**Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: The Senior Administrator Sample**

**(N = 78)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .47 | .22 | |

**Table D.7.22**

**Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: The Senior Administrator Sample**

**(N = 78)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .48 | .23 | |

**Table D.7.23**

**Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: The Section Head Sample**

**(N = 38)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .55 | .31 | |

**Table D.7.24**

**Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: The Section Head Sample**

**(N = 38)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .57 | .33 | |

**Table D.7.25**

**Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: The Section Head Sample**

**(N = 38)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .68 | .47 | |

**Table D.7.26**

**Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: The Section Head Sample**

**(N = 38)**

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| Hierarchy of Authority | .63 | .40 | |

**Table D.7.27**

**Stepwise Multiple Regression Analysis with Satisfaction with the Operating Structure as Criterion and Organizational Characteristics as Predictors: The Supervisor Sample**

(N = 261)

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .59 | .35 | |
| Procedural Specification | .64 | .41 | .06 |
| Bases for Work Assignment and Promotion | .66 | .43 | .02 |

**Table D.7.28**

**Stepwise Multiple Regression Analysis with Satisfaction with Responsibilities as Criterion and Organizational Characteristics as Predictors: The Supervisor Sample**

(N = 261)

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .46 | .22 | |
| Procedural Specification | .52 | .27 | .05 |
| Bases for Work Assignment and Promotion | .54 | .29 | .02 |

**Table D.7.29**

**Stepwise Multiple Regression Analysis with Satisfaction with Organization Functions as Criterion and Organizational Characteristics as Predictors: The Supervisor Sample**

(N = 261)

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .46 | .21 | |
| Procedural Specification | .52 | .27 | .06 |

**Table D.7.30**

**Stepwise Multiple Regression Analysis with Satisfaction with the Job as Criterion and Organizational Characteristics as Predictors: The Supervisor Sample**

(N = 261)

| Organizational Characteristics | Multiple R | $R^2$ | Increase in $R^2$ |
|---|---|---|---|
| The Climate of Supervisory Work | .42 | .18 | |
| Procedural Specification | .47 | .23 | .05 |